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Students' Perceptions of the Effectiveness of the Tennessee Pre-Professional Program for the State's Black Residents from 1984 Through 1994

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I am submitting herewith a dissertation written by Ercille Hall Williams entitled "Students' Perceptions of the Effectiveness of the Tennessee Pre-Professional Program for the State's Black Residents from 1984 Through 1994." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration.

George W. Harris, Jr., Major Professor

We have read this dissertation and recommend its acceptance:

Katherine High, Phyllis Huff, Julia A. Malia, Grady Bogue

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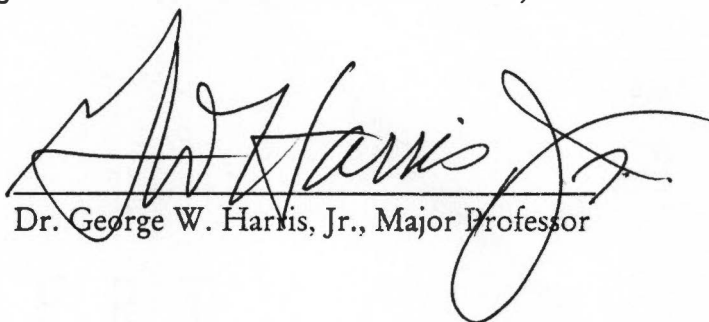
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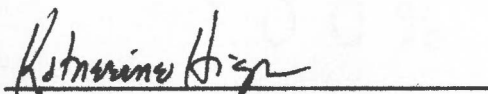
To the Graduate Council:

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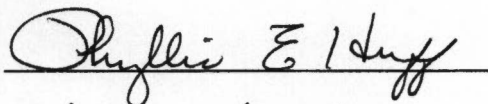


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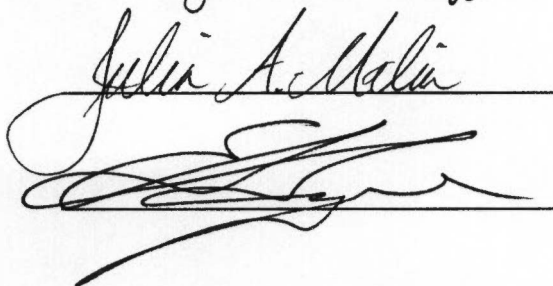
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Associate Vice Chancellor and
Dean of the Graduate School

**STUDENTS' PERCEPTIONS OF THE EFFECTIVENESS OF THE
TENNESSEE PRE-PROFESSIONAL PROGRAM FOR THE
STATE'S BLACK RESIDENTS FROM 1984 THROUGH 1994**

**A
Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville**

**Ercille Hall Williams
December 1997**

DEDICATION

This dissertation is dedicated to my parents

Mr. Dennis Cornelius Hall

and

Ms. Emma Levy Gray Hall

who have been my life-long teachers and mentors.

ACKNOWLEDGMENTS

This project has been a series of challenging experiences: highs, lows, and even keels. Recognition goes to those who have been unfaltering in their support of my efforts here. A special thanks goes to my loyal friends in the community and administrators, faculty, staff, and students at Pellissippi State Technical Community College who were encouraging and confident that I would complete this project.

I am grateful to the members of my doctoral committee, Drs. George W. Harris, Jr., Grady Bogue, Katie High, Phyllis Huff and Julia A. Malia for their leadership and guidance through this educational process.

I appreciate the love, patience and understanding of my husband, Eugene Williams, and my son, Eddward Dennis Faust. Without them, I could not have come this far.

Most of all, I thank God.

ABSTRACT

The 1984 Stipulation of Settlement of *Geier v. McWhorter*, the State of Tennessee's desegregation case, mandated the development of a series of programs that would provide access to the state public higher institutions for all of its residents. These initiatives were developed to remedy the vestiges of a dual system of higher education that practiced legal discrimination and segregation. The Tennessee Pre-Professional Program (TPP), one of the desegregation mandates, was designed to increase the representation of black Tennessee residents in the state-supported professional schools of law and medicine. Under the state's dual system of higher education, these opportunities were non-existent for the state's black population. Specifically, the goal of TPP was to increase the number of the state's black residents who enroll in and graduate from Tennessee's professional schools of medicine, veterinary medicine, dentistry, pharmacy, and law. This research project was designed to evaluate TPP to determine its effectiveness in meeting its goals from 1984 through 1994.

Based on the evaluative indicators, this research project determined that TPP was basically ineffective in meeting its goal for the 10-year period of study, in spite of a small percentage of positive outcomes. The study also determined that the program was not an efficient use of tax dollars as it was operated from 1984 through 1994. The study recommended that TPP be terminated and reestablished with similar goals under the auspices of the state professional schools of medicine, veterinary medicine, dentistry, pharmacy, and law.

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CHAPTER I

INTRODUCTION

The end of the Civil War in 1865 marked the establishment of numerous colleges and universities for the education of blacks in southern and border states. These institutions, where segregation was strictly enforced, were established to keep blacks out of white institutions (LaMorte, 1982).

A 1896 United States Supreme Court decision upheld the doctrine of "separate but equal" in *Plessey v. Ferguson*. The decision had a significant impact on the education of the black population. Customs, traditions, and Jim Crow ideals were practiced as law. "Separate but equal" remained separate and unequal for blacks (Neyland, 1990).

Public education for blacks operated in a dual system of de jure segregation that was inferior to the system established for whites. Black institutions were underfunded, operated in limited facilities, employed minimally trained faculty and staff, and provided little student support. The limited curricula at black institutions mainly provided training in vocational education, industrial trades, agriculture, and teaching. In contrast, in addition to a broad undergraduate curriculum, white institutions offered graduate and professional programs in law, medicine, pharmacy, engineering, and business. Opportunities for professional training and graduate programs were virtually denied to black students (Townsend, 1994).

The history of public education has documented numerous federal court cases that attacked the *Plessey* decision. In *Murray v. Maryland* (1935), Donald G. Murray

was unsuccessful in his attempt to enter the University of Maryland's segregated school of law. Murray's failure stimulated a class action suit charging the University of Maryland with discrimination and violation of the 14th Amendment to the Constitution. In 1936, the Supreme Court ordered the University of Maryland to admit Murray to its school of law. The Murray decision was followed by three additional suits that attacked the doctrine of "separate but equal" in higher education: *Missouri ex rel Gaines v. Canada* (1938); *Sweatt v. Painter* (1950); and *McLaurin v. Oklahoma State Board of Regents* (1950). The suit in Gaines was filed after the University of Missouri School of Law denied Lloyd Gaines, a black graduate of Lincoln University, admission to its law school. The Supreme Court held that Gaines was entitled to equal protection under the law and that the state of Missouri was obligated to provide him with a legal education substantially equal to those offered whites. The Supreme Court's ruling in Gaines established the principle that, if states did not provide educational facilities for blacks equivalent to that of whites, blacks then had to be admitted to white institutions. *Sweatt v. Painter* (1950) involved the refusal of the University of Texas to admit blacks to its all-white law school. The ruling in Sweatt constituted the first time that the Supreme Court ordered admission of a black student to a white institution on the grounds that the black law school established by the state of Texas failed to offer blacks equality of educational opportunity. The *McLaurin* (1950) case involved a black student who was admitted to the University of Oklahoma's graduate school but who was required to eat and sit apart from his white classmates. The Supreme Court ruled that such discriminatory

treatment violated McLaurin's constitutional rights and that McLaurin was entitled to the same treatment within the graduate school as his white classmates.

The Court's posture in the previous cases set the stage for *Brown v. Board of Education, Topeka* (1954). This Supreme Court landmark decision unanimously held that the doctrine of "separate but equal" was unconstitutional and violated the Equal Protection clause of the Fourteenth Amendment to the United States Constitution. The Court held that enforced school segregation imposed an inferior status on Negro children. Although the ruling in Brown was aimed at elementary and secondary schools, it also had broad implications for higher education (Morgan, 1994).

Title VI of the 1964 Civil Rights Act prohibited the distribution of federal funds to institutions, including colleges and universities, that discriminated on the basis of race. To eliminate the dual systems of education, desegregation was to be a volunteer process decreed by individual institutions (Office of Civil Rights, 1978). In 1970, several southern and border states (Alabama, Georgia, Florida, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Pennsylvania, Texas, and Virginia) were identified as maintaining dual segregated higher educational systems (Nettles, 1993). These historically white institutions had not been responsive or committed to providing access to black students. These institutions were in violation of Title VI of the Civil Rights Act; however, no efforts were made to withhold federal funds (Southern Education Foundation, 1995). In *Adams v. Richardson* (1973) the Supreme Court mandated that states had to dismantle their dual system of education. In other words, desegregation would no longer be voluntary, but ordered by the Court.

In Tennessee, similar court action was occurring in *Sanders v. Ellington* (1968). Civil action was brought against the state to prevent The University of Tennessee from constructing a new facility to expand its program in Nashville. The complaint in the case was that the dual education system established by law in Tennessee had not been dismantled. The expansion of the traditionally white University of Tennessee in Nashville, where historically-black Tennessee Agriculture and Industrial College was located, would adversely affect efforts to fully dismantle the state's dual system of education.

The case listed several plaintiffs but is cited under plaintiff Rita Sanders, a Negro student who was enrolled at Tennessee Agricultural and Industrial State University. Later, Rita Sanders became Rita Sanders Geier, thus the name of the case changed to *Geier v. (The current Governor of the State of Tennessee)*. The United States moved to intervene as a party plaintiff and asked that the court order the state defendants in the case to present a plan calculated to produce meaningful desegregation in the public University of Tennessee institutions and the institutions under the governance of the Tennessee Board of Regents. In 1984, all parties in the case agreed to a Stipulation of Settlement, which reads:

The primary purpose of this Stipulation of Settlement is the elimination of Tennessee's dual system of higher education. This purpose includes the maximization of educational opportunities for black citizens of the State of Tennessee and the improvement of educational opportunities for black citizens of the State of Tennessee. The parties agree that statewide access to public higher education in the State of Tennessee by black students and the degree of black presence in faculty and administrative positions statewide will not be decreased as a result of the implementation of the provisions of this Stipulation. It is the intention

of the parties that the dismantling of the dual system shall be accomplished in such a way as to increase access for black students and increase the presence of black faculty and administrators statewide and at the historically white institutions (*Geier v. McWherter*, p. 2, 1984).

In the Stipulation of Settlement, it also was agreed by all parties in the *Geier v. McWherter* case that the defendants would conduct studies and develop plans and numerical goals for the hiring of faculty and administrators and the enrollment of students at both the undergraduate and graduate levels at all public Tennessee institutions of higher education. The *Geier v. McWherter* Stipulation of Settlement and the degree to which it has been effective in providing access to higher education for the state's black students is the focus of this study.

Statement of the Problem

The Stipulation of Settlement has been in effect since 1984. Table 1 describes the state's desegregation programs developed and implemented as a result of the agreement. One of the most expensive components of the Stipulation is Section II.N., The Tennessee Pre-Professional Program (TPP). Section II.N. mandates that Tennessee higher education institution "defendants"

...will coordinate the development of a cooperative program to increase the number of black students who enroll in and graduate from professional programs. Every spring beginning in 1985 and for five years, 75 black sophomore students who are Tennessee residents enrolled in Tennessee public institutions will be selected by committees representing the faculties of all state-supported professional schools and all other public universities in the state for pre-enrollment in the state's schools of law, veterinary medicine, dentistry, pharmacy and medicine. There shall be representation by black faculty members on these committees, to the extent available. The professional schools will counsel these students, assist in planning their pre-professional curricula, provide summer programs at the end of their junior and senior years

Table 1
Description of Desegregation Programs

Desegregation Programs	Program Descriptions
Remediation Programs	Developmental education programs (College Preparatory Institutes) to promote retention.
Other-Race Student Incentives	Tuition discounts, grants, etc. to encourage enrollment and retention of other-race students.
The Graduate Scholarship Program	Scholarships to blacks in graduate programs in which blacks are under-represented.
Black Employee Recruitment	Funds to support extraordinary efforts in recruiting black employees.
Other Race Employment Incentives	Moving or commuting costs, release time, and other expenses necessary to attract other-race faculty and staff members.
Grow Your Own Program	Funds for institutions to pay the cost of graduate study for other-race students who would then serve as faculty members or administrators for a stated period, in return for the support given.
Black Staff Development	Funds enable black staff members to obtain advanced degrees or other special training to become eligible for higher rank/salaried employees.
Black Staff Development	Funds enable currently employed black faculty members to pursue terminal degrees in order to qualify for promotion or advancement.
New Academic Programs at Tennessee State University	Funds for the development of a Ph.D. program in public administration.
Institute of Government at Tennessee State University	Funds to enable Tennessee State University to organize a research and service institute to meet the needs of state and local government, and to offer degree courses in the public administration field.
Middle Tennessee State University - Tennessee State University Matching Scholarships	Funds which enable neighboring institutions in Middle Tennessee, one predominantly black and one predominantly white to attract and retain "other-race" students.
Non-Stipulation Programs	A variety of academic support, counseling, and scholarship programs.

Source: (1993). Tennessee Higher Education Desegregation Report. Nashville: Tennessee Higher Education Commission, p. 4.

and agree to their admission as first year professional students if they successfully complete their undergraduate work and meet minimum admissions standards. Defendants will consult with other states that have developed similar programs and develop the program described in this paragraph II.N., including a proposed budget and projected source of funds, within 180 days (*Geier v. McWherter*, 1984).

Progress has been made in the numbers of black students enrolled in Tennessee's higher education institutions. Table 2 provides total headcount enrollment, black student enrollment, and percentage of black student's enrolled in the state professional schools and law and health sciences from Fall 1992 through Fall 1994.

Implementing the various programs is expensive. The Tennessee Higher Education Commission recommended allocation of the special funds to be used for desegregation activities for fiscal years 1991-1995 (See Table 3). The TPP annual budget expenditures reached an estimated total of \$800,000 by 1994, with a yearly average expenditure of \$6,400 per participant (Tennessee Higher Education Commission, 1995). However, there is no known evidence that the program has been evaluated to determine its effectiveness.

Purpose of the Study

The purpose of this study is to gather information, evaluate findings, and analyze data to determine if the TPP has been effective during the 10-year period from 1984 through 1994 in admitting black students to and graduating black students from professional schools in law and the health sciences as stated in the Stipulation of Settlement Provision II.N. of *Geier v. McWherter*.

Table 2
Headcount Enrollment
for Professional Schools of Law and Health Sciences
Fall 1992 Through Fall 1994

	Fall 1992			Fall 1993			Fall 1994		
	Total Enrollment	# of Black Students	% of Black Students	Total Enrollment	# of Black Students	% of Black Students	Total Enrollment	# of Black Students	% of Black Students
Law	870	58	6.67	897	66	7.36	916	79	8.62
Dentistry	319	22	6.90	329	24	7.29	329	20	6.08
Medicine	870	81	9.31	893	85	9.52	913	78	8.54
Pharmacy	286	31	10.84	282	35	12.41	280	33	11.79
Veterinary Medicine	228	4	1.75	232	3	1.29	235	4	1.70

Source: (1996) Tennessee Higher Education Commission Desegregation Report. Nashville: Tennessee Higher Education Commission p. 15.

Table 3
Tennessee Higher Education Commission Recommended
Funds for Desegregation Activities for
Fiscal Years 1991-1995

Source	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Tennessee Board of Regents	\$3,701,000	\$4,263,000	\$4,369,000	\$4,708,000	\$5,067,000
University of Tennessee	\$2,250,000	\$2,290,000	\$2,441,000	\$2,831,000	\$2,933,000
Grand Total	\$5,951,000	\$6,553,000	\$6,810,000	\$7,539,000	\$8,000,000

Source: (1996). Tennessee Higher Education Commission Desegregation Report. Nashville: Tennessee Higher Education Commission, p. 8.

Research Questions

Research questions to be used in this study are as follows:

1. Is the program designed in conformity with its intended goal?
2. Is the program reaching the intended population for which it was designed?
3. Does the program employ accountability measures?
4. Is the program providing resources and services as intended in the program design?
5. Is the program producing sufficient outcomes to justify the costs incurred? In other words, is the ratio of cost to outcomes an appropriate one?
6. Do interview questions reflect students' perception of TPP?

Significance of the Study

This study will provide information concerning the effectiveness of the TPP from 1984 through 1994. It will also contribute to the research and literature in the area of desegregation in public higher education. The study is designed to identify factors that are barriers to the educational success of black students and also strategies that assist in success. In the *Geier v. McWhorter* Stipulation of Settlement, it was agreed by all parties that the defendants would commit to continue efforts to achieve their desegregation objectives and to revise these objectives as necessary after pertinent studies are completed. This study may be identified as one of the initiatives used to meet one or more of the requirements outlined in the Stipulation of Settlement. Decision makers, including the courts, funding agents, and educators, may benefit from the study by having access to the information presented on cost effectiveness analysis, program evaluation, and the identification of remedial interventions that may help black students succeed from kindergarten through professional schools. The study will present examples of institutions that have undertaken comprehensive, institution-wide efforts to make their campuses supportive environments for black students. The information derived from this study could assist prospective black students and their families to make decisions concerning educational opportunities and career paths.

Assumptions

1. The goal established for the Tennessee Pre-Professional Program is worthwhile.

2. The TPP has been in existence long enough to be evaluated.
3. Program participants are aware of the importance of stating information about the TPP that is honest and accurate and will do so.
4. Decision makers, educators, and practitioners want to employ ideas and strategies that will work to enhance educational access for all students.
5. Comparative studies of similar programs will provide valuable data in assessing the effectiveness of the TPP.
6. Student outcomes are essential in determining the effectiveness of TPP.

Limitations

1. This study will focus on only one part of the *Geier v. McWherter* Stipulation of Settlement: the Tennessee Pre-Professional Program, Section II.N. as it was implemented between 1984 through 1994. However, the program is ongoing.
2. While the TPP is an ongoing program, the 10-year period 1984 through 1994, was chosen for this study because the program was designed in 5-year periods. The end of the second design period was 1994.
3. TPP records may be incorrect, outdated, and/or incomplete.
4. The number of TPP completers is limited. Of the 750 participants who enrolled in the TPP from 1984 through 1994, only 31 graduated from the state's professional schools.

Definition of Terms

Adams v. Richardson (1973). A case in which the Supreme Court ruled that states had to dismantle their dual education system of higher education for blacks and whites.

African-American. A term used to identify people of African descent who are United States citizens or residents (Webster, p. 10, 1995. *New World Encyclopedia*).

Black. A term used to identify people of African descent who are United States citizens or residents (Webster II, p. 177, 1984. *New Riverside University Dictionary*.)

Brown v. Board of Education, Topeka (1954). A civil rights case in which the Supreme Court of the United States ruled that racial segregation in public schools was unconstitutional.

DAT. Dental Admission Test.

De jure segregation. Separation of the races by law (Webster II, p. 358, 1984. *New Riverside University Dictionary*).

Fourteenth Amendment to the United States Constitution (Equal Protection Clause). A clause that prohibits purposeful discrimination on the basis of race (World Book Encyclopedia C, p. 231, 1990).

Geier v. McWhorter (1984). A civil rights suit filed by Rita Sanders Geier and others against the state of Tennessee to dismantle its dual system of education in the state's public colleges and universities.

HBCU. Historically Black Colleges and Universities.

Jim Crow. A term used to describe the systematic practice of segregating and suppressing the black citizens of the United States, especially those who were former slaves and descendants of slaves (Webster, p. 598, 1990. *New World Encyclopedia*.)

LSAT. Law School Admissions Test.

McLaurin v. Oklahoma Board of Regents (1950). A case that involved a black student who was admitted to the University of Oklahoma's graduate school but who was required to eat and sit apart from his white classmates.

MCAT. Medical College Admissions Test.

Minority. A term that collectively refers to all races in the United States excluding Caucasians. It usually includes blacks, Hispanics, native Americans, and Asians (Webster, p. 279, 1995. *The Merriam*).

Missouri ex. rel. Gaines v. Canada (1938). A suit filed after Gaines was refused admission to University of Missouri School of Law.

Murray v. Maryland (1936). A Supreme Court case that found Murray's denial of admission to the University of Maryland's segregated law school was discriminatory and was a violation of the Fourteenth Amendment of the Constitution.

NASA. National Association of Space Administration.

Negro. A term used to identify people of African descent (Webster II, p. 789, 1984. *New Riverside University Dictionary*).

Plessey v. Ferguson (1896). A landmark Supreme Court case concerning racial segregation. The 1896 ruling established the policy of "separate but equal" public facilities for blacks and whites.

Remedial Measures. As defined in *Geier v. McWherter* (1984), methods used to remove the past and present effects of segregation and racial discrimination.

SREB. Southern Regional Education Board.

Stipulation of Settlement. An agreement by all parties in Tennessee's higher education desegregation case, *Geier v. McWherter* (1984), to dismantle the dual system of higher education in the state by increasing access of black students and increasing the presence of black faculty and administrators at the state's historically white institutions.

***Sweatt v. Painter* (1950).** A Supreme Court case that ordered Theopolis Painter, a black student, to be admitted to the University of Texas Law School.

Tennessee Board of Regents (TBR). The higher education system that comprises six 4-year state universities, 14 community colleges and technical institutes, and 26 technology centers (*Tennessee Blue Book*, 1995-1996, p. 141).

Tennessee Higher Education Commission (THEC). A coordinating board created to provide cooperation and unity among the institutions of higher education in the state (*Tennessee Blue Book*, 1995-1996, p. 140).

Tennessee Pre-Professional Program (TPP). A remedial measure to increase the representation of black state residents who enroll in and graduate from the state's professional schools of medicine, dentistry, pharmacy, veterinary medicine, and law.

The University of Tennessee System (UT). The state's university and federal land grant institution composed of six campuses across the state (*Tennessee Blue Book*, 1995-1996, p. 150).

Organization of the Study

This study report will be organized into five chapters. Chapter I introduces the study, beginning with historical background. It defines the problem, enumerates questions to clarify the direction and significance of the study, and concludes with assumptions, limitations, and definition of terms used in the study. Chapter II presents a chronological description of the development and implementation of TPP and a review of pertinent literature. The literature review includes overviews of desegregation initiatives in 11 southern and border states that address the issue of underrepresentation of minorities in public higher education institutions. Chapter III includes detailed information on the methodology and procedures used to conduct the study. Chapter IV presents findings of the analyses of the data. Chapter V includes conclusions and recommendations for practice and future research.

CHAPTER II

REVIEW OF LITERATURE

The underrepresentation of African-American students in the nation's institutions of higher education is a serious concern (Carter and Ramirez, 1995). According to Nettles (1993), African-American students are severely underrepresented in the professional schools. In a study of minorities in higher education, Carter and Ramirez (1995) found that in 1994 African Americans achieved an 8.2% increase in graduate school enrollment, compared with a 2.5% increase at professional schools and a 2.1% increase for undergraduate education. Nationally, African Americans represented only 6.4% of all graduate students and only 7.1% of students at professional schools in 1994, compared with 10.1% of all undergraduates. According to the American Council on Education (1994), the trends of the past decade showed that the numbers of black graduates and professional students were still insufficient to achieve adequate representation in the graduate school and professional programs.

In order to examine the issue of the underrepresentation of minorities in higher education and the evaluation processes necessary to address this issue, a literature review is presented in three sections: chronological development and implementation process of TPP from 1984 through 1994; desegregation programs that address the underrepresentation of minorities in higher education programs; and evaluation theories, models, and methodologies.

**The Chronological Development and Implementation
of the Tennessee Pre-Professional Program
from 1984 through 1994**

Until 1964, the state of Tennessee operated a dual system of education that denied its black citizens access to the state's professional schools. Provision II.N. of the Stipulation of Settlement in the 1984 statewide desegregation case, *Geier v. McWhorter*, required the development of a cooperative program, which included all higher education institutions in the state. The goal of the program was to increase the number of black students who were admitted to and graduated from the state's professional schools of law and health sciences. The Tennessee Pre-Professional Program was an out-growth of that federal court order (Moore, 1991). Tennessee ^{report} Higher Education Commission and TPP records indicate that, within in the 10-year period from 1984 through 1994, the TPP was continually modified. According to the Tennessee Pre-Professional Program Advisory Committee (1984), modifications were necessary to meet the requirements of the Stipulation of Settlement and to provide strategies to reach the program goal.

1984

In keeping with Provision II.N., a statewide advisory committee was established to provide guidance for developing and implementing the TPP. The committee was composed of deans of the state's professional schools of dentistry, pharmacy, law, medicine, and veterinary medicine; also included were representatives from The University of Tennessee System (UT), Tennessee Board of Regents (TBR)

and the Tennessee Higher Education Commission (THEC) (Tennessee Higher Education Commission, 1984). The advisory committee also was responsible for reporting program progress to the court. The advisory committee centered its plans around a preamble that advocated a commitment to equal access for the black citizens of the state and espoused the values necessary to carry out the project. The preamble stated:

The advisory committee recognizes the need to provide increased access to health and legal professional careers among the black student population of the state of Tennessee, and believes the TPP is one mechanism to facilitate this access.... However, it is graduation that is of primary concern to the advisory council. Various studies have documented that early years of educational development are of greater importance for learning potential in later years. The probability of graduation for students with educational deficiencies that have origins in their early educational years are limited. Since there are several factors that have a negative impact on minority access to law and health professional schools and more importantly retention of these students once they enroll, the advisory council recognizes there is no substitute for the early identification, educational development and counseling of minority students. Therefore, it is the opinion of the advisory committee that the newly formed program . . . should augment current programs for recruiting minority students. The advisory committee believes that current efforts to attract black high school and college students to professional schools . . . are critical to the success of minorities in professional schools (Tennessee Pre-Professional Program Advisory Committee, 1984).

1985

The advisory committee formulated a proposal to initiate TPP. The committee outlined the roles of the professional schools and undergraduate institutions, the duties of the central office, TPP participant requirements, summer institutes, and a proposed budget.

The five professional schools' and 19 undergraduate institutions' roles in TPP included identification and recruitment, admission of TPP participants to professional schools, academic advising, personal counseling, and communication with all parties involved in the TPP program.

It was agreed that the central office for TPP would be located at The University of Tennessee Health Science Center, Memphis. This decision was made because a law program and all health sciences programs except veterinary medicine are available in Memphis.

Table 4 lists the state's professional schools by discipline, governance, and location. The central office for TPP was to participate in all activities outlined for the professional schools and undergraduate institutions in addition to serving as a clearinghouse for TPP information, program publicity, and TPP records maintenance.

The TPP Proposal provided for two summer institutes, one in law and one in health sciences. The law institute was to be coordinated by Memphis State University Law School, a Tennessee Board of Regents institution. The health sciences institute was to be coordinated by The University of Tennessee Health Science Center, Memphis. The summer institutes were designed to provide preliminary education designed to assist or prepare student participants to complete the regular course of education in a pre-professional program. The institutes were also designed to enhance the competitiveness of student participants for admission to the five professional schools (Tennessee Higher Education Commission, 1984).

Table 4
Tennessee's Professional Schools

Discipline	Professional School	Governance	Location
Law	The University of Tennessee	The University of Tennessee	Knoxville
	University of Memphis	Board of Regents	Memphis
Medicine	The University of Tennessee	The University of Tennessee	Memphis
	Health Science Center East Tennessee State University	Board of Regents	Johnson City
Pharmacy	The University of Tennessee Health Science Center	The University of Tennessee	Memphis
Veterinary Medicine	The University of Tennessee	The University of Tennessee	Knoxville
Dentistry	The University of Tennessee Health Science Center	The University of Tennessee	Memphis

Source: (1984). Tennessee Pre-Professional Program Advisory Committee. Tennessee Pre-Professional Program Proposal. Nashville: Tennessee Higher Education Commission.

There were no application or tuition charges for participation and participants were awarded stipends of \$800 plus room and board for the duration of each institute. In addition, textbooks, laboratory, and clinical materials were provided. In keeping with the Stipulation of Settlement Provision II.N., the goal of TPP was to collectively admit 75 black students into the law program and 75 into the health sciences during its first year of operation and each year for a 5-year period. It was proposed that students be selected from all undergraduate institutions in the state.

To be eligible for participation in TPP, students had to meet the following criteria:

1. A legal resident of Tennessee
2. Completed one year of undergraduate study upon application to TPP
3. Completed two semesters of biology, general chemistry, and college math (not applicable to law applicants).

According to the advisory committee, students who were accepted into the TPP were assured of admittance to a state-supported professional school of medicine, dentistry, pharmacy, veterinary medicine, or law provided they satisfied the following requirements:

1. Satisfactory completion of two 8-week TPP summer institutes, one of which must have been completed after the junior year, one after the senior year, and prior to admission to a professional school. Progress and promotion in the TPP required that students earn no less than a "C" in each course attempted.

2. Satisfactory completion of all admission requirements established by the professional school of choice.

Financial assistance was available for TPP students who were admitted to one of the state professional schools.

Also in 1985, college sophomores were identified to participate in the first summer institute to begin in summer of 1986. Three thousand solicitation letters were sent to the black student population who were eligible to participate in the program. This action generated only 100 applications of which 38 students were accepted into the TPP (Tennessee Pre-Professional Program Advisory Committee, 1990).

1986

The program deviated several times from the original proposal. The first Law and Health Sciences Summer Institute was scheduled to begin but did not come to fruition. According to the 1984 Tennessee Higher Education Commission Report, the legislature failed to allocate supplemental funds that were earmarked for desegregation efforts. Therefore, the summer institutes' plan to begin in 1986 did not occur.

1987

The 1987 summer institute was the first actually held. The Law and Health Sciences Summer Institutes were held concurrently during an 8-week period. Only black Tennesseans enrolled in Tennessee's state-supported colleges and universities were eligible to participate in TPP. Twenty-three students participated in the first TPP institute, 10 in health sciences and 13 in law. A TPP director was employed to oversee TPP Central Office operations. Prior to this appointment, the TPP Advisory

Committee was responsible for administration of the program. These functions included: (1) preparing and distributing TPP material to potential TPP participants, (2) providing undergraduate institutions with information about TPP, (3) responding to inquiries about TPP, and (4) maintaining TPP records.

1988

The Stipulation of Settlement required that 75 new students be added each year to the law and health sciences components of TPP, but limited enrollment to students enrolled in the state's public institutions of higher education. According to the advisory committee (1990), in an attempt to increase the number of TPP students, permission was obtained from the court to extend the program to black Tennessee residents attending both public and private institutions in and out of state. However, the number of participants enrolled in the program (75), was still below the 150 students mandated in the Stipulation of Settlement.

The summer institutes evolved into two separate programs (Level I and Level II). Level I was designed to assist and prepare students in completing regular courses in a pre-professional program. These enrichment functions included communication skills, counseling and review of entrance examinations. Level II activities were designed to enhance the students' performance on admissions tests, increase skills in reading comprehension, organization and greater retention information.

The program was expanded to include black Tennessee residents who were enrolled in private and public institutions in and out of state. The 5,000 solicitation letters generated an enrollment of 75 participants (52 in health sciences and 23 in law).

1989

A database and tracking system for TPP were developed and began operation.

In 1989, 5,000 solicitations letters generated 109 student participants in the summer institute (66 in health sciences and 43 in law).

1990

The 2,850 solicitation letters generated 139 participants. An evaluation of the TPP was submitted to the court by the Tennessee Pre-Professional Program Advisory Committee (1990) outlined strengths and weaknesses of the TPP.

The report stated that the primary strength of the program was that 47 former TPP participants were currently enrolled in professional schools, 34 in health sciences, and 13 in law schools. Other strengths of TPP included:

- the opportunity it provided students to acclimate and gain institutional exposure to the environment, the faculty, courses, and each other in advance of professional school enrollment;
- the presentation of learning skills components which examined study behaviors and provided direction for improvement;
- the counseling it offered prospective students regarding admission by addressing policies, requirements, expectations, and direction to that regard;
- the advance academic exposure that gave students and faculty a sense of each other for the realization of mutual expectations; and
- a forum where young people could help each other understand their needs, idiosyncrasies, and experiences that made them better understand coping techniques and strategies.

Several weaknesses were listed:

- Four individuals have served as program directors, three briefly as interim directors and one for 2 years; thus, continuity has been limited.
- Summary data concerning each of the summer institutes had not been prepared annually and maintained in an organized way. As a

consequence, significant research was needed to acquire historical data concerning applications and program participants.

- Students who complete Level I should receive their evaluations within one week after finishing the summer institute. In many cases, these evaluations have taken 9 months or more to complete; thus, the evaluation had little impact on course scheduling at the student's undergraduate institution. This limits the effectiveness of TPP counseling, delays the student's ability to return for Level II, and ultimately delays the ability of the student to compete for admission to professional schools.
- In recent years, the percentage of TPP faculty for the health sciences institute who were high school teachers has been increasing. Five of the eight who have been elected to teach Level I students in the 1990 summer institute are faculty from the Memphis City School system.
- Utilization of undergraduate advisors has been limited.
- Post-sophomore students have not been admitted to TPP as originally planned. Rather, students have been admitted to the program near the end of the junior year and have attended the summer institute shortly thereafter. The intervening year, originally set up to allow the undergraduate advisors to work with the students, had been lost (Tennessee Pre-Professional Program Advisory Committee, 1990).

1991

TPP participation showed a decline in 1991: 60 students participated in the health sciences and 36 in law. According to the 1991 TPP annual report, the TPP director had concerns in the following areas:

- while TPP can accommodate 150 students, historically the program has been unable to attract that number of qualified candidates;
- the academic backgrounds of health profession students were a concern because not all participants had completed a majority of core science requirements (two in biology, chemistry, and mathematics);
- a satisfactory summer program curriculum was needed to address a diversity of academic backgrounds; and
- operational policies and criteria were needed to effectively measure student progress (TPP Annual Report, 1991).

1992

The Advisory Committee recommended that TPP summer institute be expanded to three sites to provide statewide access to the programs and to address curriculum weaknesses. TPP operated on three campus sites during its 1992 Summer Institutes: Memphis State University (Law–Levels I and II), East Tennessee State University (Health Sciences–Level I) and The University of Tennessee Health Science Center, Memphis (Health Sciences–Level II). A total of 92 students participated, 40 of whom were in the health sciences and 52 in law (Tennessee Pre-Professional Program Annual Report, 1992).

1993

According to the TPP Advisory Committee (1993), the Stipulation of Settlement II.N. specified identification and selection of participants during the sophomore year of college. However, their participation was delayed in the summer institutes until after completion of the junior year. According to the advisory committee, to increase the odds that a student would progress through the undergraduate years in an orderly and timely manner, participants were to be selected prior to the freshman year with interventions to begin the following summer.

The TPP Advisory Committee recommended Jumpstart as a program modification. The Tennessee Pre-Professional Program Jumpstart Program was to be introduced to include high school seniors, college freshmen, and college sophomores. The total program capacity was to be 30 students: 10 high school seniors; 10 college freshmen; and 10 students from a pre-law program at East Tennessee State University.

The program would offer 8 weeks of work-related experience in the fields of medicine, dentistry, pharmacy, veterinary medicine, and law. The Jumpstart program was to be non-residential, with an \$800 stipend for each student. Jumpstart was to be located on the campus of The University of Tennessee Health Science Center, Memphis.

1994

The advisory committee submitted recommendations to meet the requirement of the Stipulation of Settlement, to satisfy the interest of the court, to provide the necessary combination of strategies to reach the goal of the program, and to meet the needs of the state's black students who wanted to enter the state's professional schools of law and health sciences. The recommendations included:

1. change the name to Tennessee Pre-Professional Fellowship Program;
2. further separate law from health sciences and have two separate programs with a director for each area;
3. compensate for TPP advisors—TPP advisors are those persons located at all the state undergraduate institutions who are responsible for recruiting, advising, and counseling TPP participants;
4. revise and enhance the curriculum for Summer Institutes to avoid the perception that TPP is a remedial program;
5. develop three distinct levels and include Jumpstart as a level in the summer institutes;
6. use regular full-time faculty from the state's higher education institutions;

7. provide incentives for students by maintaining summer stipends for Levels I and II;
8. enhance recruitment efforts to meet the required number of students, 75 in law and 75 in health sciences per year; and
9. maintain an effective student data base that includes a tracking system.

A review of the chronological development and implementation of TPP revealed that unclear and oftentimes inconsistent information made it difficult to conceptualize the full intent and direction of the program. The lack of continuity in documenting and reporting the yearly activities of the program, left voids that made following the program's development problematic. However, a review of available information on the chronological development and implementation of TPP confirmed that this initiative resulted from a mandate of the Stipulation of Settlement Provision II.N. of *Geier v McWhorter*, the desegregation case of the state of Tennessee. The program was designed to increase the number of black residents of the state who enroll in and graduate from Tennessee's professional schools of medicine and law. From 1984 through 1994, the period of study of this research project, the program enrolled a total of 750 students with ongoing monitoring and modifications. Thirty-one of the 750 students admitted in TPP persisted through graduation at one of the state's professional schools of pharmacy, dentistry, veterinary medicine, medicine or law.

**Desegregation Programs That Address the
Underrepresentation of Minorities
in Higher Education Programs**

Tennessee was one of several states mandated to desegregate its dual system of higher education and develop programs that address the underrepresentation of minorities in higher education programs. Title VI of the Civil Rights Acts of 1964 instructed states that practiced segregation based on race to voluntarily dismantle their dual systems of higher education. After non-compliance of ten southern and border states, the Supreme Court ordered these states to dismantle their dual systems of higher education (*Adams v. Richardson, 1973*). Each state was required to submit a desegregation plan to the Office of Civil Rights. Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Pennsylvania, Texas, and Virginia were among the states that developed programs to enhance minority access to programs in higher education and professional schools (Office of Civil Rights, 1978). Several studies found that many factors affected the representation of minorities in higher education programs and professional schools. Patterson (1991) suggested that early experiences in education was a factor that influenced education aspirations. The Southern Education Foundation (1995) and Bernstine and Eaton (1994) agreed that academic preparation was a factor in the representation of minorities in higher education programs. In addition to academic preparation, Geoth and Kuh (1994) found that social attitudes and location of the institution influenced academic access. Nettles (1993) suggested that finances kept blacks out of higher education programs

because they could not deal with the financial pressures. Carter and Ramirez (1995) discussed the inadequate counseling and the lack of information as contributing factors. Lang and Ford (1992) contended that the lack of minority faculty as role models and mentors affected minority enrollment in higher education programs.

Each of the eleven states developed desegregation programs to address the underrepresentation of minorities in higher education programs. A review of the literature revealed that the desegregation program may or may not have reported specific outcome data, but each state demonstrated an effort to provide access to higher education programs for its minority citizens. Following the identification of each state, data on state operated programs are presented.

Alabama

As of January 1995, Alabama's plan to desegregate its higher education had not been accepted by the United States Office of Civil Rights. However, according to the Alabama Commission on Higher Education (1990) the state of Alabama has developed programs to enhance minority access to higher education and professional schools.

Academic preparation for professional schools begins with a student's first experience in an education setting. Early experience usually influences future educational aspirations (Patterson, 1991). A 1994 study found that the inadequate preparation of black students starts with the earliest educational experiences (The Southern Education Foundation, 1995). To address early childhood education as an avenue to higher educational opportunities, several public and private institutions of higher education have collaborated in the Alabama Consortium for Minority Teacher

Education desegregation program which identifies and recruits minority students to prepare them as teachers in early childhood education and elementary programs.

Students are recruited through churches, community agencies, and schools and are encouraged to apply to one of the several institutions. Each institution specializes in a different education discipline. Each year, the consortium has set a goal of recruiting 20 new students for each institution, and each student then receives academic support and financial aid. The report indicated that the institutions monitor students through college completion and most are now certified teachers in Alabama public and private schools, but it did not provide numerical data on the program (Alabama Commission on Higher Education, 1990).

Florida

In a study of financial aid, Nettles (1990) proposed that to increase the numbers of minority students in graduate institutions and to keep them there until they graduate, the financial pressures they face must be better understood. The costs of higher education are tremendous and have been spiraling upward for the past decade. Nettles concluded that minority students are historically less able to deal with the costs of graduate and professional schools because a higher proportion of minority students come from families in the lower socioeconomic strata. This is further complicated by the indebtedness most students must assume to pursue both undergraduate and graduate education.

Florida's Miami-Dade Community College focused on an early intervention program. Miami Promise is an early academic preparation program that focuses on

sixth-grade students. Miami-Dade Community College, the Urban League of Miami, the Dade County Public Schools, the United Teachers of Dade, and the Mitchell Wolfson Senior Foundation work in partnership to increase the number of minority students attending college. The students were selected according to the following: standardized test scores, grade point average, and parental involvement. Students were also required to enroll in mathematics, science, English, social science, and computer literacy courses. Once enrolled, the students received scholarships. The scholarship funds are raised by sponsors and matched dollar for dollar by the Mitchell Wolfson Senior Foundation. The level of funding increases as students enter Miami-Dade Community College. Since its inception in 1990, the program reported that 500 students have enrolled. However, the data on students enrolled in higher education institutions as a result of this program is not yet available (Phillips, 1990).

Georgia

According to the Georgia Board of Regents of the University system of Georgia (1995), the state of Georgia recently started a new financial aid program to provide access for minorities to higher education programs. Helping Outstanding Pupils Educationally (HOPE) is a program that uses proceeds from the state's new lottery. Under HOPE, public college tuition is paid for all freshmen and sophomores who earn a "B" average at the undergraduate level and whose families earn \$100,00 or less. Program data show that 54,000 students received HOPE grants in 1993-94. The program has been praised for expanding access to historically black colleges and universities, such as Albany State, Fort Valley State, and Savannah State. Increases in

enrollment were described as sizable. The report did not provide specific outcome data.

Kentucky

A 1989 study that sought to identify factors that affect retention of black students in higher education institutions reported that black students tended to be dissatisfied with peers and the social dimensions of the school and the community in which the school is located; black students did not perceive cooperation between black and white students; they did not perceive equal opportunities for black and white students, nor did they see a connection between the schools' recruitment and retention practices and the graduation of blacks from white colleges (Morgan, 1994).

Kentucky's 1990 diversity plan addressed these issues of concern. Its Equal Opportunity Plan required that traditionally white institutions set goals for diversity for 1995. These goals called for increases in the following:

- number and percentage of minority students;
- first-year retention;
- degree attainment;
- graduate enrollment; and
- number of minority faculty and administrators at traditionally white institutions.

The state legislature then passed a law in 1992 that said if an institution was not making sufficient progress toward these goals, it could not seek approval of any new degree programs from the state's Council of Higher Education. Although the overall

goal is not enumerated, the report stated that sufficient progress was defined as reaching 20 percent of the goal in the first year, 40 percent the second year, and so on. The report stated that the council determined that five institutions were not eligible to seek new programs due to insufficient progress toward the goals. Kentucky has eight public universities, including one Historically Black Colleges and Universities (HBCU), and 14 community colleges. It also noted that seventeen of Kentucky's higher education institutions made progress toward diversity goals. The Kentucky report did not define progress toward goals (Kentucky Council on Higher Education, 1995).

Louisiana

Several studies documented the lack of access to the appropriate courses and poor advising from school counselors as factors that affect the underrepresentation of blacks in higher education programs. Goetz and Kuh (1992) noted nation-wide that an average of 43% of black ACT test takers had taken core academic courses recommended for a college preparation program, compared to the 62% of white test takers. The ACT is viewed as an indicator of student's plans to attend college (Nettles, June 1994). Grambling State University's Development Education program is a remedial measure used by the state of Louisiana to address the under-preparedness of students who enter college.

The Louisiana Board of Regents (1990) affirmed that at Grambling State University, the Developmental Education Program offers underprepared students tutoring and other support services in math, English, reading, and writing. In existence

since 1975, the program targets students who scored 16 or less on the ACT, and each student undergoes a battery of diagnostic tests for appropriate placement. The program, housed at the Academic Skills Center, focuses on providing students with a learning laboratory and tutoring in reading, mathematics, and English. The report indicated that at least 1,000 students are enrolled in the program on an on-going basis and that the program is used as a pipeline to undergraduate, graduate and professional education. It did not provide further data.

Maryland

This report was included because it exemplifies the ongoing struggle that still persists with the desegregation programs. One of Maryland's desegregation programs has been challenged in the courts. The Benjamin Banneker Scholarship Program was developed at the University of Maryland at College Park as part of Maryland's effort to remedy vestiges of its formally segregated system. The program, established in 1978, offers four-year scholarships for up to 30 black students who have 3.0 GPA's or higher and SAT scores of 900 or above. The Fourth Circuit Court of Appeals recently ruled that the race-based features of the program were too broad a remedy for the conditions that the state was trying to cure. The decision has been appealed to the United States Supreme Court (Maryland Higher Education Commission, 1990).

Mississippi

In a study that focused on the need to understand barriers to academic upward mobility, Bernstine and Eaton (1994) asserted that the greatest barrier to access to professional schools for black students was inadequate preparation. They concluded

that African Americans often found themselves at a complete disadvantage with elementary or secondary education that inadequately prepared them for advanced college curricula.

Mississippi Valley State University, one of the state's three historically black public institutions, sponsored "The Algebra Project," which develops middle school students' basic math skills to prepare them for the high school college-prep mathematics sequence. Part of a national effort with more than two dozen local sites, the project has been conducted by the math/computer science and education departments at Mississippi Valley since 1992. At Mississippi Valley, there are two major components:

1. Summer sessions in which sixth- and seventh-grade teachers received training on teaching basic concepts and methods that need to be learned, based on a curriculum developed by the national project. Participating schools were self-selected; any school system that decided to participate sent all sixth- and seventh-grade teachers and adopted the national curriculum.
2. Saturday workshops were presented at Mississippi Valley, for both students and teachers. The students practiced math problems and worked with tutors, while the teachers practiced delivering lessons and were critiqued by project staff members. The Algebra Project is undergoing evaluation and results are not available (Board of Trustees of the State of Mississippi, 1994).

North Carolina

Since 1987, the graduate school at the University of North Carolina at Chapel Hill (UNCCH) has sponsored a 10-week summer program that engages minority undergraduates in research projects aiming to increase their interest in attending graduate school. After analyzing demographic indicators, the graduate school developed the Summer Pre-Graduate Research Experience Program, targeting black students who have completed their junior year and are interested in research opportunities at the graduate and professional levels. Since 1987 the program has brought more than 150 minority students to the University of North Carolina Chapel Hill campus to conduct research and write a research report under the direction of a faculty preceptor.

Other components of the program also aim to stimulate and prepare students for graduate school life. Participants meet with successful minority graduate students and postdoctoral fellows on campus and attend seminars and workshops that build their test-taking, writing, and computer skills and inform them of financial aid and career opportunities. The program recognizes the potential financial pressure students face and offers a \$2,500 stipend, a \$1,000 food allowance, free on-campus housing, and, when necessary, support for round-trip travel to the campus. Interest in the program has increased dramatically over the years. Typically, 30 students are admitted to the program each year. The graduate school set up a system to monitor students' academic careers after participating in the program. Although the program information did not give overall enrollment figures, it was reported that more than half of all participants

have attended graduate school, and two have earned their Ph.D. (North Carolina Commission of Higher Education, 1990).

Pennsylvania

Many studies proposed that the lack of appropriate role models is a factor that affects the underrepresentation of minorities in graduate programs and professional schools. The main campus of Pennsylvania State University sponsors the Center for Minority Graduate Opportunities and Faculty Development. Central to the center's work is providing training, support, and assistance to minority coordinators, who are designated from each college in the university to help recruit and retain minority faculty. The center also sponsors the annual Pennsylvania Conference on Graduate Opportunities for black and Hispanic students, which encourages undergraduates to make early decisions to attend graduate and professional schools, and provides intensive workshops on how to apply to graduate school and professional schools. The program report stated enrollment of blacks in the state professional and graduate schools showed a 5% gain over 1990 statistics. In 1991, blacks represented 3% and 4% of the full-time faculty and the administration at its main campus. This percentage was slightly up over 1986 figures (Pennsylvania Department of Education, 1991).

Texas

Carter and Ramirez (1995) proposed that in all parts of the educational system, not enough African American youth progress from one level to another, and many who do had received inadequate advising/ counseling, inaccurate information, or no information.

University of Texas at El Paso and El Paso Community college are key players in a comprehensive effort known as the El Paso Collaborative for Academic Excellence, aimed at increasing minority high school graduation rates and college participation rates. The collaborative was launched formally in 1990 by three local school superintendents. Community education and business leaders are working continuously to link K-12 to higher education. In the group's mission statement, academic success was defined as a series of competencies that would allow students to complete grade 14 with all career and university options open to them. The program organizers acknowledged that it would take several years for all aspects of the program to be implemented, after which time the results of the program's progress would be available (Texas Higher Education Coordinating Board, 1994).

Virginia

Established with the goal of increasing the pool of minority students who are prepared for undergraduate, graduate and professional education, a Better Information Project focused on introducing Virginia's colleges and universities to parents and students, outlining admissions requirements and procedures, explaining the financial aid process, and encouraging students to enroll in college prep classes. Run jointly by the State Council of Higher Education and the Department of Education, the project funds presentations, publications, programs, and statewide workshops. Project staff and representatives have made more than 250 presentations to parents, students, and counselors in schools, churches, community centers, and via statewide televised broadcasts. The program measures its success by the almost 1,100 high school students

that lived and learned on a college campus (State Council on Higher Education for Virginia, 1994).

The states of Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Pennsylvania, Texas, and Virginia developed programs to address the underrepresentation of minorities in higher education. These programs addressed the following factors: early education experiences, inadequate preparation, poor advising/counseling, little or no financial assistance, and the lack of positive role models. A review of the literature noted that programs provided access to higher education opportunities for minority students. However, it was found that some of the programs did not provide the necessary data to assess their outcomes.

Evaluation Theories, Models, and Methodologies

Increasing minority participation and achievement in the nation's colleges and universities are issues of national and state, as well as institutional, importance. There has been too little progress in minority enrollment in higher education programs (Patterson, 1991). Nettles (1993) suggested that imaginative strategic planning, new ideas and efforts are needed to make more progress in higher education initiatives for minority students. Evaluation can be used to increase awareness and enhance plans and strategies for improving minority participation and achievement in higher education. The review of the literature found that there is a rapidly expanding body of literature of different theories, models, and methodologies on education evaluation (Aston, 1991). Those presented in this review are: five major evaluation frameworks; advantages and disadvantages and the five major evaluation frameworks; public-

relations evaluation; objective-based evaluation; experimental evaluation research; decision-oriented research; consumer evaluation; client-centered evaluation; connoisseur evaluation; and a comprehensive evaluation model that includes a cost-effective methodology.

Five Evaluation Frameworks

Gardner (1977) noted that the five definitions that established the general framework for most evaluations in higher education today are (a) evaluation as a professional judgment, (b) evaluation as a measurement, (c) evaluation as the assessment of congruence between performance and objectives, (d) decisions oriented evaluation, and (e) goal-free/response evaluation. Gardner acknowledged that the first four evaluation frameworks were identified by Stufflebeam et al. (1971), and the fifth was identified by Scriven (1973). Gardner used the following outline to present the basic assumptions and distinguishing characteristics of the five frameworks that defined and categorized evaluation:

1. Statement and explanation of the principal focus of the definitions
2. Examples of the definition in current practice
3. Basic premises and assumptions
4. Advance organizers—variables that structure the evaluation process
5. Nature of expected outcomes and modes of interpretations

Table 5 shows the basic assumptions and distinguishing characteristics of the five frameworks.

Table 5
Five Evaluation Frameworks

	Professional Judgement	Measurement	Congruence Between Performance and Objectives	Decision Oriented	Goal-Free Responsive
Principal Focus	Expert opinion of qualified professionals	Measurement of results, effects, or performance, using some type of formal instrument (test, questionnaire, etc.)	Comparison of performance or product with previously	"Delineating, obtaining and providing useful information for judging decision alternatives."	Identification and judgment of actual outcomes (irrespective of goals, standards, etc.)
Examples	Accreditation teams. Doctoral Committees. Peer review of grant proposals. Referees for selection of manuscripts for publication/promotion/Tenure decisions.	GRE scores. Faculty activity questionnaires. Attitude surveys. Teaching effectiveness questionnaires.	Teacher certification based on achievement of prescribed competencies. Evaluation of academic departments on the basis of stated goals. Behavioral objectives.	Management Information Systems. HEPS (Higher Education Planning System).	Evaluation reports of "program side effects."
Basic Assumptions	Best evaluation is the expert opinion of a qualified professional.	Best evaluation is obtained from measurement data. Thing to be evaluated has measurable attributes.	Best evaluation is based on an examination of achievement in light of goals or objectives. Goals or objectives exist and are identifiable.	Best evaluation is one that serves decision makers in specific decision situations. Decision making processes are rational.	Best evaluation highlights actual outcomes and/or concerns of consistencies and sponsors. The most effective approach is "open-minded" and "sensitive."
Advance Organizers	Values may or may not be explicitly defined. Evaluator expected to be an information collector, synthesizer and judge.	"Norm-referenced," quantitative values. Formal setting required for application of the measurement instrument. Instrument must be validated, reliable, etc. Evaluator must be a measurement expert.	"Criterion-referenced" (goal oriented) values. Measurement technology commonly used within the context of performance vs. goal assessment. Evaluator may be expected to "judge" as well as measure.	"Decision-oriented" values. Information system methodology. Evaluation should be an information system specialist.	"Holistic approach" (all contributing elements, etc. considered as they related to each other). Evaluator must be skilled in human interaction and identification of concerns.
Nature of Outcome/ Interpretation	Educated, personalized opinion of a qualified judge or panel of judges.	Number or set of numbers which can be compared to other numbers or a standardized scale; data; descriptive statistics. Interpretation in reference to norms.	Judgment of worth based on comparisons between performance data and objectives or standards of performance.	"Continuous," timely, and relevant information for administrators to assist in judging decision alternatives. Interpretation and administrative function; evaluator concerned with extraction and reduction of data.	Descriptive information regarding "actual" outcomes. Interpretation responsive to constituent concerns.

Source: Gardner, Don (1977). "Five Evaluation Frameworks: Implications for Decision-Making in Higher Education." *Journal of Higher Education*, Volume 48, Number 5.

Advantages and Disadvantages of the Five Evaluation Frameworks

In his study of the five frameworks that characterized and defined evaluation, Gardner explained that the simplest method of evaluation had its definite advantages and disadvantages. In Table 6, Gardner used a construct similar to Table 5 to present the advantages and disadvantages of the five evaluation frameworks. He concluded that the analyses within the model were designed to highlight some of the principal differences between the major evaluation models in higher education.

Public-Relations Evaluation

In a study conducted by Stufflebeam and Webster (1980), they found that, in general, the public-relations evaluation sought information that would be most helpful in securing public support. Typical methods used in public-relations studies are surveys, experiments, and consultants. The researchers suggested that a pervasive characteristic of the public-relations evaluator's use of dubious methods was a biased attempt to nurture a good picture of the object of the evaluation. Researchers confirmed that on occasions, evaluators, believing they were doing an objective assessment, discover that their client has other intentions. Stufflebeam and Webster recommended being cautious when using this evaluation method.

Objective-Based Evaluation

Tyler (1950) developed the model for objective-based evaluation. According to Tyler, objectives were mandated by the client, formulated by the evaluator, or specified by persons involved with the process. The purpose of an objectives-based evaluation was to determine whether the objectives have been achieved. Program

Table 6
Advantages and Disadvantages
of the Five Evaluation Frameworks

	Professional Judgment	Measurement	Congruence Between Performance and Objectives	Decision Oriented	Goal-Free Responsive
Advantages	Easily implemented. Uses assimilative and integrative capabilities of human intellect. Recognizes outstanding expertise.	Proper validation and consistent application results in high comparability and replicability. Data mathematically manipulable. Generalizeable results.	"Goal-orientation" provides objective basis for evaluation. Judgment criteria pre-established by objectives vs. performance measures selected. Relevant to current social concerns.	Increased understanding of decision setting and information requirements. Focus on decision information needs assures relevancy of data. Encourages analysis of all factors affecting important decisions.	Flexible, adaptive approach. Useful in complex, relatively unstructured situations. All outcomes, etc. potentially relevant. "People-oriented"—high acceptance potential.
Disadvantages	Results criticized as non-replicable, non-comparable and overly subjective. Generalizability difficult or impossible.	Many variables difficult or impossible to measure. Often inappropriate and/or inflexible—serving available measurement tools instead of the problem. Measurement attributes often irrelevant.	Focus may be too limited—noteworthy goals easily identified. Important side-effects may be overlooked. Tendency toward over-emphasis on end-product evaluation.	"Rational decision making" not predominant model in most real-life situations. In practice, frequent inability to cope with changing decision information needs. Inflexibility of "packaged" systems.	Relatively unstructured approach may be difficult to focus and manage. Results criticized as non-replicable, non-comparable and overly subjective. Questionable credibility if an evaluator is a non-expert in area of thing evaluated.

Source: Gardner, Don (1977). "Five Evaluation Frameworks: Implications for Decision-Making in Higher Education." *Journal of Higher Education*, Volume 48, Number 5.

developers, sponsors, and managers were typical audiences for such a study. The clients of these studies usually wanted to know which students have achieved which educational objectives. Tyler suggested that the methods used in objectives-based evaluations essentially involved the collection and analysis of performance data relative to specified objectives.

Accountability Evaluation

Lessinger (1970) proposed that accountability evaluation was one method to improve education. This assessment provided constituents with an accurate accounting of results. In accountability evaluation the stakeholder wanted to know whether the involved personnel and organizations charged with responsibility for educating students and for improving education were achieving all they should be achieving, given the investments of resources to support their work. Lessinger contended that methods used in accountability studies include mandated testing programs; performance contracting; and procedures for auditing the design, process, and results of other evaluation/studies.

Experimental Evaluation

Experimental research evaluation was promoted by Lindquist (1953). This model was labeled as a questions-oriented or quasi-evaluation strategy because it started with questions and methodology that may or may not be related to assessing worth. The purpose of the experimental research evaluation was to determine causal relationships between specified independent and dependent variables such as a given instructional method and student standardized test performance.

Decision-Oriented Evaluation

Cronbach (1982) introduced the decision-oriented evaluation. The decision-oriented assessment emphasized that evaluation should be used proactively to help improve a program as well as retroactively to judge its worth. According to Cronbach, the purpose of this type of evaluation was to provide knowledge as a basis for making and defending decisions. Many methods may be used in a decision-oriented study. These include surveys, needs assessments, case studies, advocate teams, observations, and quasi-experimental and experimental designs. In support of Cronbach, Stufflebeam (1968) and Worthen and Sanders (1973) introduced a conceptualization of evaluation that was based on the idea that evaluation should help educators make and defend decisions that are in the best interest of meeting students' needs.

Consumer Evaluation

In the consumer approach to evaluation, the evaluator was the enlightened surrogate consumer, according to Scriven (1973), the pioneer of this model. The consumer evaluation model was created to judge the relative merits of alternative educational goods and services and to help taxpayers and practitioners make wise choices in their purchase of educational goods and services. He noted that the general question addressed is: Which of several alternative consumable education objects is the best buy, given their costs, the needs of the consumer group, and the values of society at large? Methods include checklists, needs assessments, goal-free evaluation, experimental and quasi-experimental designs, and cost analysis.

Client-Centered Evaluation

In direct contrast to the consumer evaluation was the client-centered evaluation, a process developed by Stake (1970). The client-centered assessment took the local autonomy view and helped people who were involved in a program to evaluate it and use the evaluation to improve it. This evaluation was designed to help people in a local setting understand the operations of their program, the ways the operations were valued by the people affected by them, and the ways they were valued by people who are expert in the program area. Stake's approach was further developed by Rippey (1993) and Guba and Lincoln (1981).

Connoisseur Evaluation

Scriven (1973) advocated connoisseur evaluation as an assessment method. This method assumed that certain experts in a given field were capable of in-depth analysis and evaluation that could not be done in other ways. Connoisseur evaluation described critically, appraised, and illuminated the particular merits of a given project or program. The methodology of connoisseurship includes the critics' systematic use of their perceptual sensitivities, past experiences, and refined insights. The evaluators' judgment were then conveyed to help the audience appreciate and understand all of the nuances of the object under study.

Comprehensive Evaluation Model

The comprehensive evaluation model suggested by Rossi et al. (1979) included monitoring as well as impact and cost-effective analyses. Rossi et al. argued that a comprehensive evaluation model makes it possible (a) to determine whether a program

intervention or treatment was carried out as planned; (b) to assess whether the program resulted in changes or modifications consistent with the intended outcomes; and (c) to determine whether program funds were used efficiently.

Rossi and Wright (1977) suggested that monitoring evaluations were directed by two key questions: (a) Whether the program was reaching the appropriate target population, and (b) whether the delivery of services was consistent with program design specifications. Bernstine and Eaton (1994) noted that monitoring evaluations are needed for accountability. Guba and Lincoln (1981) contended that monitoring evaluations are necessary adjuncts to impact assessment, since the failure of programs often is due to faulty or nonimplementation of interventions rather than ineffectual treatment.

Monitoring evaluations were concerned with outcomes (Rossi et al. 1979). Rossi et al. identified service records and program participants as two data sources that provided information for monitoring program outcomes. According to Rossi et al. almost all programs are required to keep records. Such information generally is useful in determining program accountability.

Rossi et al. (1979) cautioned that all records systems were subject to greater or lesser degrees of unreliability. They noted that some records could contained incorrect or outdated information and other records could be incomplete. They emphasized the risk in using service records as the only data source. They suggested that program staff, intentionally or unintentionally, could exaggerate the extent to which different program elements were delivered to target populations. Sometimes

this was the result of an overzealous concern with maintaining appearances of efficiency and responsibility. They further asserted that there are occasions in which program staff's interpretations of a particular intervention service will differ from that of program designers.

Program participants were another source of data advocated by Rossi et al. (1979) in comprehensive program evaluations. Rossi et al. supported this data source because they contended that such information was valuable in that (a) providers may not be aware of what is important to program participants; (b) participant satisfaction data were necessary; (c) it could have been the only way for evaluators to find out what was actually delivered; and (d) participant understanding of the program should not be assumed. Data collection included surveys, questionnaires, and interviews (Creswell, 1994).

An impact evaluation gauged the extent to which a program caused change in the desired direction. It implied that there was a set of prespecified, operationally defined goals and criteria of success: a program that has impact was one that achieved some movement or change toward the desired objectives (Worthen and Sanders, 1973).

The objective of impact assessment was to establish, with as much certainty as possible, whether or not an intervention was producing its intended effects. Impact evaluation needed to be undertaken as systematically and rigorously as possible in order to document the causal linkages between intervention inputs and program outcomes (Stufflebeam et al. 1971).

Planners and project designers often made use of impact evaluations to identify the mix of specific intervention elements that had the greatest likelihood of affecting project participants. They found small-scale impact evaluations were an economical approach to formulating intervention strategies prior to their widespread utilization. Project managers and administrators used the results of impact assessments to document the worth of their efforts to funding groups (Gardner, 1977).

Impact evaluations are essential when there is an interest in either comparing different programs or testing the utility of new efforts to ameliorate a particular community program (Guba and Lincoln, 1981).

The basic aim of impact assessment was to estimate the net effects or net outcomes of an intervention. Net effects or net outcomes were those results attributable to the intervention, free and clear of the effects of other elements present in the situation under evaluation (Rossi et al. 1979). The starting point for impact evaluation was the identification and explication of one or more outcome measures that reflect the intervention goal and that were sensitive enough so that an identifiable change in them could occur if the intervention is efficacious (Stark, 1990; Rippey, 1993).

Cost-benefit analysis was an assessment method used by Rossi et al. (1979) to compare program cost and benefits. In its simplest terms, efficiency of interventions meant that benefits derived from a project must be greater than its costs. According to Rippey (1993), what was required, then, was the calculation of program benefits and costs. Benefits were the net outcome derived from a program, both tangible and intangible.

Costs were somewhat easier to calculate (Rossi et al., 1979). They were the program inputs, both direct and indirect, the resource required to conduct the program (Hanson, 1989). An important consideration for the determination of project costs was the economists' notion of opportunity costs, or the value of foregone opportunities (Rossi et al., 1979).

Calculation simply consisted of comparing cost and benefit totals, either directly to ascertain net benefits or more usually as the ratio of benefits to costs. Alternatively, the anticipated rate of return could be calculated. A comparison of benefit-to-cost ratios or the other summary measures across different programs therefore provided the necessary data on the relative efficiency of various project alternatives (Rossi et al., 1979).

This comprehensive evaluation model can be used to increase awareness and enhance plans and strategies for improving minority participation and achievement in higher education. Evaluation is a method that can be used to clarify issues, identify models of success, identify reasons for failure, examine the impact of existing policies and strategies and provide the rationale for establishing new policies and strategies.

Summary

The review of literature describes the Tennessee Pre-Professional Program as a remedial measure to increase the representation of black residents of the state who enroll in and graduate from the state's professional schools of law and health sciences as outlined in the Stipulation of Agreement in Provision II.N. of *Geier v. McWherter*. Documentation shows that from 1984 through 1994 the program efforts have enabled

many of the state's black students to pursue careers that at one time were denied to them. A review of the literature also shows that vestiges of segregation still exist in many southern and border states and often act as barriers to the education of black students from kindergarten through professional school.

The literature documents programs that have been developed to provide access to educational opportunities for black students geared toward public higher education and professional programs. In order for minority students to progress through graduate and professional school, it is advantageous for them to get into the educational pipeline early. These programs are remedial measures to aid minorities in accessing higher education opportunities and keeping them in the pipeline. Although much has been done to address the problem of underrepresentation of African Americans in graduate programs and professional schools, there is still much to do (Nettles, 1994). Problems need to be addressed at the earliest levels of education and intervention needs to proceed through professional programs.

Nettles (1991) asserts that the evaluation of these programs is necessary to assess activities, interventions, and to make decisions about their worth in providing ongoing access to higher education programs for minority students. This means that evaluation is valuable in generating data and information needed for setting goals and measuring progress toward increasing minority student's preparation for entering and performing in institutions of higher education. It also means that evaluations can be used to improve the practices used by higher education institutions to identify and admit minority students and to predict and monitor their success.

CHAPTER III

METHOD

This research project was an evaluative study to determine the effectiveness of the Tennessee Pre-Professional Program (TPP). The data obtained were used to determine if the TPP was meeting its goal to increase the representation of black state residents who enrolled in and graduated from the state's professional schools of medicine, dentistry, pharmacy, veterinary medicine, and law from 1984 through 1994. This section of the study presented the research design, population definition, methods of collecting data including the evaluation model, panel of experts, and data analyses.

Research Design

Both quantitative and qualitative research methods were used in this study to determine the effectiveness of TPP. Qualitative research is categorical in nature where data are the results of processes that classify observations. Quantitative research is numerical in nature where data are the results of a process that quantifies, consisting of numbers representing counts and measurements (Triola, 1994).

The role of the researcher as the primary data collector for this study necessitated a statement of values, assumptions, and biases at the onset of a study (Creswell, 1994). The researcher submits the following statement:

My perceptions of access to higher education for black students were shaped by my personal experiences as a member of this minority group. I believe my experiences enhanced my role as the primary researcher of this study. My awareness, knowledge, and sensitivity were valuable in the many challenges and issues I encountered in undertaking this research project. Because of my ethnicity I brought certain biases to this study. Although every effort was made to remain objective, these biases

shaped the way I viewed, understood, and analyzed data. To address any preconceived ideas and to safeguard the interest of those who have a stake in this study, I solicited the assistance of a panel of experts. I commenced this research project with the perception that this study was immense and challenging but necessary from both personal and professional perspectives.

Population Definition

The population of this study is the total number ($N=750$) of black residents of Tennessee who were enrolled in the state's professional schools of medicine, veterinary medicine, pharmacy, dentistry, and law as TPP participants for a 10-year period, 1984 through 1994. A subset of the population was chosen for the study because all members shared similar characteristics. The subset is the total number ($n=31$) of black Tennessee residents who enrolled in and graduated from the state's professional schools of medicine, veterinary medicine, pharmacy, dentistry, and law as TPP participants for a 10-year period, 1984 through 1994. To avoid participation biases, 31 selected individuals who enrolled in TPP but did not complete the program were also included in the study.

Method of Collecting Data

According to Ewell (1983), Gardner (1977), Worthen and Sanders (1973), Rossi, et al., (1979), and Stufflebeam (1968), evaluation for effectiveness is determined by criteria that measure the worth of the program that is being evaluated. The following research questions were used as evaluation criteria for the TPP program. After each criterion, indicators to assess the effectiveness of the criterion were listed. The results of these measures were used to determine the effectiveness of TPP. This evaluative

model was designed from a combination of evaluative models, methodology, theories, and practices (Erwin, 1991; Stufflebeam et al., 1971; Tyler, 1950; Cronbach, 1982; Lessinger, 1970; Rossi & Wright, 1977; Rossi et al., 1979; and Nettles, 1990).

1. Criterion: Is the program designed in conformity with its intended goal?

Indicator: the extent to which the program followed its plans for implementation.

2. Criterion: Is the program reaching the population for which it was designed?

Indicator: the numbers of students recruited compared to the program's recruitment goals.

3. Criterion: Does the program employ accountability measures?

Indicator: documentation of evidence utilized to report program results and progress.

4. Criterion: Is the program providing resources and services as intended in the program design?

Indicator: the amount of dollars appropriated for program resources and services as compared to the amount of dollars promised for resources and services.

5. Criterion: Is the program producing sufficient outcomes for the cost incurred? In other words, is the ratio of cost to outcomes an appropriate one?

Indicator: the overall cost of the program compared to the total number of participants enrolled, total number of program graduates, and total number of graduates who acquired licensure in law and health services.

6. Criterion: Do interview questions reflect students' perception of TPP?

Indicator: students' responses to interview questions.

Two methods were used for data collection for this study, TPP records and participant telephone interviews. Researchers suggested that almost all programs are required to keep records. Such information generally is useful in determining program effectiveness. However, all records are subject to greater or lesser degrees of unreliability. Records may contain incorrect, out dated, and incomplete data (Creswell, 1994; Rossi et al., 1979; Worthen and Sanders, 1973; Stufflebeam and Webster, 1980; Banta, 1991). According to Selltiz et al. (1976), telephone interviews are useful for this type of study when there are limited resources. This study was not supported by a grant or other outside funds. Both the funding and collecting of information were the responsibility of the researcher.

Selltiz et al. (1976) supported collecting data by the telephone interview process rather than a written survey questionnaire because it may encourage spontaneity on the part of the respondents as well as reinforce motivation to communicate effectively and thoroughly. Selltiz et al. pointed out two disadvantages of using this type of method to collect data: (a) With today's quest for privacy, a number of people have unlisted telephone numbers; and (b) telephone interviews that take more than 1 or 2 minutes to complete may result in the conversations being terminated before

completion. The study took into consideration the advantages and disadvantages of collecting research information by telephone. All data collected by telephone from participants were recorded for analysis.

The TPP is a state-supported program and is required to keep records of the service it provides. These records were used to make assessment of the program's design, goals, target population, services and resources, student outcomes, accountability, and economic efficiency. TPP records produced unsolicited and unanticipated information that was used to assist in the evaluation of TPP effectiveness. Data collected from these sources were analyzed, and used to help determine the effectiveness of the program.

Recorded data collected from TPP participants and data generated from TPP records were held in strictest confidence by the researcher. The data collected for this study will not be released in any individually identifiable form unless required by law. Individual responses from participants were analyzed and reported in combination with other responses. The data were utilized only for this study and will not be used for any other purpose unless TPP participants are informed in detail and consent is obtained. Collected data are stored in a vault in the Office of the Senior Vice President of The University of Tennessee and will be disposed of as required by the university.

Panel of Experts

A panel of experts was defined as a group who are qualified to make judgments and render a professional opinion about a program that is being evaluated (Guba and Lincoln, 1981; Ewell, 1983; Dressel, 1976; Worthen and Sanders, 1973; and Rossi et al.,

1979). A panel of experts was used for this study for a two-fold purpose: to minimize researcher biases and to recognize that the members of the panel are stakeholders in the programs.

The panel of experts was asked by letter to review the evaluation criteria and telephone interview guide for content validity (Appendix D). The panel of experts was asked to make recommendations for any modifications to both documents that would assist researchers in evaluating the TPP (Scriven, 1973; Gardner, 1977). The panel of experts offered no recommendation for modification and agreed that the evaluation criteria and the interview guide were appropriate to measure the effectiveness of TPP.

Members of the panel were chosen because of their direct knowledge of TPP. Each panel member has been or is presently involved with the program at the developmental level, implementation level, or involved in monitoring activities. The panel of experts was approved prior to conducting the research on the program.

Data Analyses

To analyze qualitative data the researcher used codes to identify categories of data. The researcher identified and described patterns and themes from the perspective of the participants and then attempted to understand and explain the patterns and themes. A list of ideas was chronicled in the study. Taped interviews were transcribed verbatim in order to preserve the accuracy of the participants' statements. Descriptive methods were used to display, summarize, and analyze both quantitative and qualitative data (Johnson, 1992). The information that was produced from this data was presented, summarized, and analyzed using tabular methods. Findings and data

analyses were used to present conclusions and recommendations in regard to the effectiveness of TPP in enrolling and graduating Tennessee's black students from the state's professional schools of law and health services.

CHAPTER IV

ANALYSES AND FINDINGS

This study is an evaluative research project with the purpose of gathering, assessing, and analyzing data to determine the effectiveness of the Tennessee Pre-Professional Program (TPP) for the state's black students from 1984 through 1994. The program was developed as a mandate of the Stipulation of Settlement of *Geier v McWherter*, Tennessee's higher education desegregation case. Provision 11.N. of the settlement required that a cooperative program, which included all the higher educational entities in the state, be developed to address the under-representation of the state's black students enrolled in the state's professional schools of law and health sciences.

Several sets of data including TPP central office records, TPP annual reports, and TPP advisory committee reports were sources used to collect information for the research. Because the program is a cooperative effort among the state higher education entities, TPP records from the Tennessee Higher Education Commission (THEC), The University of Tennessee (UT), and Tennessee Board of Regents (TBR) institutions also were used as data sources. Interview questions were used to solicit responses from TPP participants as to their perceptions of the program. A discussion of the findings and analyses of data are presented following each criterion and indicator, the format that defined the evaluation model used to determine the program's effectiveness.

Presentation of Analyses and Findings

1. **Criterion:** Is the program designed in conformity with its intended goal?

Indicator: the extent to which the program followed its plans for implementation.

Research found that, in 1984, an advisory committee, composed of members of THEC, UT, and TBR, formulated a plan to increase the representation of black state residents who enrolled in and graduated from the state's professional schools of medicine, dentistry, pharmacy, veterinary medicine, and law. The purpose of the plan became the goal of TPP, one that had been established by the Stipulation of Settlement Provision II.N. of *Geier v. McWherter* (1984). Chapter Two presented a detailed outline of the program.

The Tennessee Pre-Professional Program Advisory Committee (1990) reported that, because of the difficulties in implementing TPP, the advisory committee petitioned the court for modifications in the original design. TPP was originally developed with two prematriculation components called summer institutes. These institutes were designed to provide academic and financial assistance for the black citizens of Tennessee who enrolled in the state's professional schools of medicine, pharmacy, dentistry, veterinary medicine, and law. As an agreement of the Stipulation of Settlement, TPP would be a cooperative effort that included all of the state undergraduate institutions. The law institute was to be coordinated by Memphis State University Law School, a Tennessee Board of Regents institution. The health sciences institute was to be coordinated by The University of Tennessee Health Science Center.

The two summer institutes, divided into two levels, provided two functions. The preliminary function prescribed for Level I was to assist and prepare participants to complete the regular course of study in a pre-professional program at the undergraduate level. At Level I, course work was to include enrichment functions, counseling, and review of entrance examination for professional schools. The activities designated for Level II were designed to enhance the competitiveness of TPP participants for admission to the five professional schools. These activities included the improvement of performance on admission tests, increased reading speed, higher comprehension skills, and greater retention of information (TPP Advisory Committee, 1984). The original TPP design was developed so that students could enroll in Level I at the post junior year, progress to Level II at the post senior year, and then enter professional school. Participant data confirmed that students were not progressing through Level I and Level II as planned (TPP Advisory Committee, 1990).

After presentation of these data to the court, approval for modification in the program's progressions system was granted. TPP implemented alternative methods by which participants could progress from Level I to professional school. Alternative methods allowed participants to complete Level I and/or Level II after additional course work. Participants could delay enrollment in another summer institute because of personal circumstances. Participants could be counseled out of the program if interventions were unsuccessful, and were encouraged to pursue other career options (TPP Advisory Committee, 1990).

TPP records revealed that, originally, TPP's summer institutes were held in institutions in West Tennessee only. To accommodate students across the state, an additional Health Sciences Summer Institute was established at East Tennessee State University in 1992. Jumpstart, a component to acquaint high school students, college freshman, and college sophomore with TPP, was added in 1993. TPP records revealed that, in 1994, recommendations were made for modifications in the program design to accommodate three distinct levels in the health sciences program and in the law program. These modifications included the following:

Jumpstart - Not site specific

Level I - East Tennessee State University (Health Sciences Program)

University of Tennessee, Knoxville (Law Program)

Level II - University of Tennessee Health Science Center, Memphis (Health

Sciences Program)

Memphis State University (Law Program)

It also was recommended in 1994 that students enroll in TPP at any level. The original program required first-time enrollment in TPP at Level I only.

2. **Criterion: Is the program reaching the population for which it was designed?**

Indicator: the numbers of students recruited compared to the program's recruitment goals.

The program's recruitment goal per year was 150 participants. The program participants were to be selected from public undergraduate institutions within the

state. Since students were eligible for TPP after completion of their junior year in undergraduate school, identification of potential participants was to begin during their sophomore year. The TPP recruitment plan was designed to utilize various initiatives to enroll the 150 participants. A major portion of recruitment was the responsibility of the Central Office at The University of Tennessee Health Science Center, Memphis. TPP was publicized through promotional materials such as brochures and tapes that presented the program objectives, admission criteria, financial aid information, and the name of a contact person at each professional school. Promotional materials were used in radio, television, and newspaper media and at recruitment fairs. TPP informational workshops were developed and presented at targeted locations in West, Middle, and East Tennessee. Other promotional efforts were made with the cooperation of the undergraduate institutions through classes, faculty, counselors, staff, student organizations, campus radios, and campus newspapers (Moore, 1991).

According to the TPP Advisory Committee (1990), limiting TPP to Tennessee residents who were enrolled in public undergraduate institutions within the state did not generate the 150 students needed to meet the TPP recruitment goal for 1987 or 1988. With permission of the court, the program was expanded to Tennessee residents who were enrolled in private schools within the state and in both private and public institutions in other states. Recruitment visits were made to historically black colleges and universities that enrolled a significant number of Tennessee students (Moore, 1991).

Table 7, the Tennessee Pre-Professional Program Application Flow 1987-1994, presents the efforts and results of the recruitment plan designed to enroll 75 participants in the Law program and 75 participants in the Health Sciences program. The 1986 enrollment figures are not included because the program was canceled due to the legislature's failure to allot supplemental funds that were earmarked for TPP and other desegregation programs (Moore, 1991). According to Moore (1991), the delay in the program negatively impacted the enrollment for 1987. The 3,452 applications mailed out in 1987 generated only 15% of the 150 needed to meet the recruitment goals mandated by the court. In 1988, 5,103 applications were mailed to prospective participants and generated 50% of the mandated recruitment goals. 1989 figures showed an increase in enrollment by 45%. 1990 activity recorded the fewest number of applications mailed out, generating 144 program applicants. Application activity decreased for 1990 and 1991. Applicants enrolled in 1991 and 1992 showed a decline over 1989 and 1990. However, 1993 and 1994 showed an increase in enrollment. According to Moore (1993), the Jumpstart Program, piloted in 1993, contributed to enrollment in 1993 and subsequent years. The Jumpstart Program was developed to increase enrollment in TPP by offering a pre-TPP enrollment program for high school seniors and undergraduates. Applications received for 1989 and the period from 1991 through 1994 exceeded the number of applications needed to meet the enrollment goals. However, the figures in the table show that all applications received were not accepted. Other applications were denied, withdrawn, and incomplete. The evidence suggested that five directors in seven years may have contributed to the unexplained

Table 7
Tennessee Pre-Professional Program
Applicant Flow 1987 - 1994

Activity	1987	1988	1989	1990	1991	1992	1993	1994
Applications (mailed out)	3,452	5,103	5,000	1,147	2,662	2,662	2,210	1,051
Applications Received	71	283	300	144	187	319	310	347
Applications Accepted	36	82	95**	–	116	170	136	142
Applications Denied	12	61	75	–	44	67	69	75
Applications Withdrawn	–	–	–	–	20	78	3	34
Applications Incomplete	–	–	–	–	54	82	85	90
Applicants Enrolled	23	75	109	139	96	92	107	108

Source: Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: The University of Tennessee Health Science Center.

Note: The data are suspect because totals do not seem to agree.

gaps in the data presented in Table 7. The advisory council (1990) determined that the 150 participants needed to meet the program recruitment goal was unrealistically high. However, after a petition to the court to modify the recruitment goal, it remained unchanged.

The TPP records provided enrollment data that reflected recruitment efforts. Enrollment data for TPP program participants in Table 8 summarized enrollment by year and disciplines. Examination of these data showed that from 1987 through 1994 the enrollment totaled 749 with 452 in health sciences and 279 in law. Enrollment in the law program for 1987 and 1992 was greater than enrollment in the health sciences programs. This inequity may be contributed to evidence of what appears to be recruitment biases. Evidence revealed that because of the location of TPP's central office at The University of Tennessee Health Science Center, Memphis, TPP was often perceived as a medical program. The directors of TPP, housed in the central office of The University of Tennessee, Memphis, may have also enhanced the perception that TPP was a medical program. A consultant reported what appeared to be another recruitment bias. Wells wrote,

Each program should have a separate brochure although each may refer to the other available program. Currently, a very attractive brochure depicts a young African American male with a white coat and a stethoscope. While this is clearly attractive to students thinking about a career in health sciences, it does not deliver an equivalent message to prospective law students.

From 1991 through 1994 enrollment in the health science programs was consistently higher than in the law program. For the 8-year period, the health sciences programs enrolled approximately 52% more students than the law program.

Table 8
TPP Program Participants
by Year and Discipline

Year	#	Health	Law
1987	23	10	13
1988	75	52	23
1989	109	66	43
1990	139	92	47
1991	96	60	36
1992	92	40	52
1993	107	66	41
1994	108	66	42
TOTAL	749	452	297

Source: Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: The University of Tennessee Health Science Center.

Table 9 presents student enrollment data by levels and disciplines. For the 8-year period, 1987 through 1994, almost 50% more students enrolled in Level I than progressed to Level II. The data in Table 8 (TPP Participants by Year and Discipline) and Table 9 (TPP Student Enrollment Data: 1987-1994) should reflect equal program totals. An examination of these data confirm that a comparison of program totals for Tables 9 and 8 indicate discrepancies for six of the eight years. These discrepancies suggest that TPP participation data are inconsistent and inaccurate. This information is presented in a tabular form at the bottom of Table 9.

Table 10 reveals participant data on progression from the undergraduate level to professional school. The data for professional school to graduation for 1990 through 1994 are missing. Indications are that data may not have been reported in a timely manner. These data suggest that during the period of study of the research, 9 participants graduated in 1988, 11 in 1989, and 11 in 1990 (with a total of 31). Table 10 also shows the number of TPP participants that graduated from the state's five professional schools: 3 dentistry, 3 law, 13 medicine, 1 pharmacy, and 1 veterinary medicine (with a total of 21). When calculated by professional school, the graduation totals are 21, but when the graduation totals are calculated by year, they equal 31. The missing data suggest that the total number of graduates reported for the 10-year period of study is questionable at best and challenge the validity of TPP data.

The state's professional schools of law and health sciences enroll black students who have not been TPP participants. The TPP Advisory Committee (1993) conducted a study of TPP to determine the overall impact of the program design comparing TPP

Table 9

TPP Student Enrollment Data: 1987-1994

LEVEL/DISCIPLINE	1987	1988	1989	1990	1991	1992	1993	1994	Total
TPP I									
Pre-Dentistry	2	6	2	2	4	1	1	2	20
Pre-Law	13	13	29	23	23	31	31	34	202
Pre-Medicine	3	23	24	38	31	21	32	38	210
Pre-Pharmacy	2	9	9	15	5	5	10	12	67
Pre-Veterinary Medicine	0	0	0	0	1	0	0	0	1
Level I Total	19	51	64	84	64	58	74	86	502
TPP II									
Pre-Dentistry	0	1	3	8	1	1	0	1	15
Pre-Law	0	6	14	16	14	21	10	8	89
Pre-Medicine	0	12	22	21	15	8	18	9	105
Pre-Pharmacy	0	3	6	15	2	5	5	2	38
Pre-Veterinary Medicine	0	0	1	0	0	0	0	0	1
Level II Total	0	22	46	60	32	35	33	20	248
PROGRAM TOTAL	19	73	110	144	96	93	107	106	750
Table 8 Totals	23	75	109	139	96	92	107	108	749
Discrepancies	-4	-2	+1	+5	0	+1	0	-2	+1

Source: Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: The University of Tennessee Health Science Center.

Table 10

TPP Student Progression Data: 1987-1994

LEVEL/DISCIPLINE	1987	1988	1989	1990	1991	1992	1993	1994	Total
TPP I to TPP II									
Pre-Dentistry	1	1	0	0	1	0	1	n/a	4
Pre-Law	8	4	17	11	15	8	6	n/a	69
Pre-Medicine	3	9	8	1	1	4	4	n/a	30
Pre-Pharmacy	2	5	4	1	1	2	0	n/a	15
Pre-Veterinary Medicine	0	0	0	0	0	0	0	n/a	0
Level I Total	14	19	29	13	18	14	11		118
TPP II to Professional School									
Pre-Dentistry	n/a	0	2	7	1	0	0	1	11
Pre-Law	n/a	3	9	12	12	3	5	2	46
Pre-Medicine	n/a	6	18	17	14	7	12	8	82
Pre-Pharmacy	n/a	2	5	9	1	3	4	1	25
Pre-Veterinary Medicine	n/a	0	1	0	0	0	0	0	1
Level II Total		11	35	45	28	13	21	12	165
Professional School to Graduation									
Dentistry	n/a	0	2	1	—	—	—	—	3
Law	n/a	2	0	1	—	—	—	—	3
Medicine	n/a	5	4	4	—	—	—	—	13
Pharmacy	n/a	2	4	5	—	—	—	—	1
Veterinary Medicine	n/a	0	1	0	—	—	—	—	1
Graduation Total	n/a	9	11	11	—	—	—	—	31

Source: Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: University of Tennessee Health Science Center.

and non-TPP students. Table 11 shows the total number of African-American TPP participants and non-TPP participants who enrolled in and graduated from the state's professional schools of law and health sciences from 1987 through 1992. TPP student data reveal that, for this period, a total of 17 African-American TPP students had graduated from the state-supported professional schools and 63 were still enrolled. During the same period, 102 non-TPP African-American students graduated from the state-supported professional schools and another 76 were enrolled. Data on students who passed professional examinations in their chosen discipline were not included in this report. The data further indicate that 16 of the 17 TPP graduates were in health sciences and one in law. There were 56 of the 63 TPP participants enrolled in health sciences compared to 7 in law. Data of non-TPP graduates indicate that 58 were in Law and 44 health sciences. Of the 76 non-TPP graduates enrolled, 45 were in health sciences and 31 were in law. Analysis of these data suggests that non-TPP students do enroll in the state's professional schools of law and health sciences and graduate in greater numbers than those who choose the TPP as a route to professional school.

3. Criterion: Does the program employ accountability measures?

Indicator: documentation of evidence utilized to report program results and progress.

Significant TPP accountability measures were documented in program records. The 1990 TPP Summary Report, written by the TPP Advisory Committee and published by the Tennessee Higher Education Commission provided evidence that TPP utilized accountability measure to collect, record, and report program data. The

Table 11
Total African American Enrollment in and
Graduation from Professional Programs 1987 - 1992

Graduated				Currently Enrolled		
Discipline	TPP	Non-TPP	Total	TPP	Non-TPP	Total
Pharmacy	2	14	16	13	10	23
Vet Medicine	1	3	4	0	2	2
Dentistry	2	5	7	4	15	19
Medicine	11	22	33	39	18	57
Law	1	58	59	7	31	38
Grand Total	17	102	119	63	76	139

Source: Moore, Leroy (1993). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: The University of Tennessee Health Science Center.

1990 Summary Report was a cumulative presentation of information on the development of TPP from 1984 through 1990. Findings and discussions within the document cited difficulties in implementing TPP as stipulated in Provision II.N. of the Stipulation of Settlement. The report outlined strengths and weaknesses in TPP followed by recommendations for changes to address the weaknesses and modifications to Provision II.N. of the Stipulation of Settlement. The 1990 TPP Summary Report documented the following student data for 1987 through 1990: applications received, accepted, incomplete, rejected; progression from one level to another; retention rates; graduation rates; expenditures; and projected expenditures.

The Tennessee Pre-Professional Program Annual Report published by TPP Central Office provided documentation of measures of accountability from 1991 through 1994. These reports provided an overview of TPP, beginning with the process for recruitment and selection of students and followed by student progress results similar to the student data documented in the 1990 TPP Summary Report.

The TPP Annual Report 1994 documented the following four measures of accountability utilized to evaluate TPP: (a) a review and audit of all data provided concerning the history of TPP, its student enrollment, progression, and graduation rates; (b) program impact survey to generate information from all participating institutions in the Tennessee public higher education system; (c) a site visit to each professional school by representatives of The University of Tennessee (UT), Tennessee Higher Education Commission (THEC), and Tennessee Board of Regents (TBR); and (d) program assessment by outside consultants.

Utilization of accountability measures in TPP records was evident. However, it also is also documented in Criterion 2 that much of the data present in the student progress report on enrollment, progression, and graduation rates are insufficient, missing, or unavailable. These inconsistencies raise the questions of data validity and data reliability. No data were found that documented accountability measures of evidence of participant tracking and follow-up.

4. Criterion: Is the program providing resources and services as intended in the program design?

Indicator: the amount of dollars appropriated for program resources and services as compared to the amount of dollars promised for resources and services.

As a result of the Stipulation of Settlement of *Geier v. McWherter*, 13 desegregation programs were developed by the state. These programs focused on increasing access to the state's higher education institutions for black faculty, staff, and students. Table 12 is a calculation of TPP expenditures by year, enrollment, total expenditures per year, cost per participant, number of graduates, and cost per graduate. The TPP records did not indicate any lack of funding for the program except for 1986, the first year designated to begin the summer institutes. Because funds earmarked for the program were not made available, TPP did not begin until 1987. However, evidence from TPP records results found that TPP is costly. From 1987

Table 12

TPP Expenditures by Year and Enrollment

Budget Year	# of Participants	Expenditures	Cost Per Participant	# of Graduates	Cost Per Graduate
1987	23	\$ 7,300	\$ 317	no data	—
1988	75	\$ 200,000	\$ 2,700	9	\$ 22,200
1989	109	\$ 630,000	\$ 5,800	11	\$ 57,300
1990	139	\$ 750,000	\$ 5,400	11	\$ 68,200
1991	96	\$ 800,000	\$ 8,300	no data	—
1992	92	\$ 800,000	\$ 8,700	no data	—
1993	107	\$ 800,000	\$ 7,500	no data	—
1994	108	\$ 800,000	\$ 7,400	no data	—
Total	749	\$4,787,300	\$ 6,400*	no data	

Source: (1995). Tennessee Higher Education Commission Desegregation Report. Nashville: Tennessee Higher Education Commission.

Source: Adopted from Table 8.

Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: University of Tennessee Health Science Center.

Source: Adopted from Table 10.

Moore, Leroy (1994). Tennessee Pre-Professional Program Annual Report. TPP Central Office. Memphis: University of Tennessee Health Science Center.

* Average cost of TPP participants from 1984 through 1994.

through 1994 TPP's cost ranged from approximately \$7,300 to \$800,000 (Tennessee Higher Education Commission, 1995), with the mode being \$800,000. An average cost per TPP participant during this 8-year period was \$6,400. The cost per 9 graduates totaled \$22,200 in 1988. The cost per 11 graduates in 1990 totaled \$68,200, an increase of over \$10,000 for the cost of the same number of graduates for 1989 which totaled \$57,300. The data representing the number of graduates for 1991 through 1994 were not presented. Cost per graduate could not be calculated for those 4 years because of insufficient data (see Table 12).

The desegregation funds were provided for services needed to implement and maintain TPP. Program expenditures included summer institutes, central office operation, instructional salaries, equipment, and financial support for participants.

5. **Criterion: Is the program producing sufficient outcomes for the cost incurred? In other words, is the ratio of cost to outcomes an appropriate one?**

Indicator: the overall cost of the program compared to the total number of participants enrolled, total number of program graduates, and total number of graduates who acquired licensure in law and health sciences.

Calculation of expenditures per graduate from 1991 through 1994 was not possible because of the unavailability of data for that time period, as suggested by blank spaces in the table. The data in Table 12 indicate that expenditures have grown from \$7,300 in 1987 for 23 participants at an average of \$317 per participant to \$800,000 in 1994 for 108 participants at an average of \$7,400 per participant. The goal of TPP was

to enroll and graduate Tennessee's black residents from state-assisted professional schools. According to the data in Table 12, TPP expenditures total \$4,787,300 from 1987 through 1994. The calculation was \$6,400 per participant for graduate and nongraduates of professional schools. In the calculation of cost per graduate for the same period, the limited data show an expenditure of \$51,000. These figures suggest that the amount of desegregation funds expended on the TPP appears excessive compared to the results of graduation rate, the ultimate goal of TPP. Tables 8 and 9 data show an inconsistency in the number of participants who enrolled in TPP from 1987 through 1994. The data in Table 8 show 749 as the number of participants and Table 9 shows 750. For consistency, the number 750 will be used in this part of the discussion. Thirty-one students persisted through graduation at the state professional schools of law and health sciences. The number of participants who graduated from each program and acquired licensure for practice cannot be accurately ascertained from TPP information, again because of inconsistency in reporting and the absence of follow-up data. Of the 750 enrolled in the program, 719 exited the program at levels and pathways that also cannot be ascertained from available data.

6. Criterion: Do interview questions reflect students' perceptions of TPP?

Indicator: students' responses to interview questions.

To assess the effectiveness of TPP from perceptions of those who participated in TPP, a group of participants were asked to provide demographic data and respond to a set of interview questions. The 31 program completers and the same number of non-completers were chosen for this research project. Data needed to locate these 62

TPP participants were extremely limited, incomplete, nonexistent, or outdated. The unavailability of data of the TPP programs has persisted throughout this research project. TPP data contained a list of participants of the program; however, there was no updated information on their present location. Locating those respondents required an inordinate amount of effort, time, and money. This project's persistence only found 16 of the TPP participants to respond to interview questions. All participants located agreed to participate in the research project. Because program information on non-completers is almost nonexistent, completers also supplied information on TPP non-completers they knew for this research project. It is noted also that contact information on completers was readily given by family members including fathers, mothers, and brothers. The efforts located 11 completers. TPP records enabled the location of 5 non-completers, giving the research project a total of 16 respondents. All respondents had attended professional schools in the Memphis area. The completers graduating from the health sciences program included 8 pharmacy graduates, 1 dentist, 1 medical doctor, none in veterinary medicine, and 1 in law. The non-completer respondents included 2 law school participants and 3 health science participants. The researcher's efforts located completers and non-completers within the state, outside the state, at work and at home.

The overwhelming enthusiasm of all participants to respond to interview questions is noteworthy. It is noteworthy also that families took pride in the accomplishments of these participants. The researcher observed that having someone inquire about a family member who had accomplished his or her goals seemed

extremely important to the family and was a proud moment. The researcher observed also that these attitudes transferred to the TPP graduates, who for example, were interrupted while feeding twin children, at work in a pharmacy, taking an afternoon nap, taking the dog to the vet, or going to observe a surgical procedure. All wanted to share their stories.

When asked how they came to be involved in TPP, all respondents, completers and non-completers, made reference to a specific person—a fellow student, a professor or a counselor—who suggested the program to them. They were not aware of the marketing campaign designed to recruit students until after they entered the program. The participants agreed that the personal contact by an interested party caused their involvement in the program. They suggested personal contacts as a recruiting method rather than the hype of the media.

Their experience with TPP tended to be different according to their chosen discipline and according to their status as completers or non-completers. For those who completed one of the health science disciplines, the experiences were not only rewarding but appreciated. The completers agreed that the experiences in TPP prepared them for professional school academically, emotionally, and socially. They reported that Level II prepared them for the rigorous academic demands of professional school. The TPP also prepared them to deal with the stress necessary to complete a professional course of study. The completers developed a special bond with one another. They depended on one another for emotional and academic support. They felt that having others who had shared the prematriculation experiences at

undergraduate level was an advantage. As they pursue their individual careers, that special bond is still a part of their lives, they reported.

The completers acknowledged their concerns for non-completers. They agreed that intervention efforts should be administered in a more timely manner. They suggested that if students were not prepared for the rigorous demands of professional school, early and intense intervention efforts might have been successful. The presence of black role models at the professional level would have been an asset to those who were struggling and those who were succeeding as well. One completer felt sad at noticing a classmate who had completed at least 2 years of dental school but had dropped out. The completer particularly found it painful that the classmate was now reported to be homeless and an alcoholic. He again emphasized intervention as a key to success in professional schools. A completer shared an example of a more successful participant who did not complete the program. The TPP non-completer earned an advanced degree and is working in the field of education. The TPP completer was concerned that while state funds were used to provide assistance to this successful participant, as a non-completer the participant was counted as unsuccessful according to the guidelines that define the TPP goal.

The completers and non-completers in the law program reported similar experiences. First, they perceived the law program to be remedial in nature because it appeared to be a watered-down curriculum. Second, they recalled that the recruitment brochure for TPP focused on the medical school while giving little notice to the law

program. This assertion is substantiated by the TPP brochure, which was a very attractive brochure that depicts a young African-American male with a white coat and a stethoscope. While this is clearly attractive to students thinking about a career in health sciences, it does not deliver an equivalent message to prospective law students (Wells, 1993). In an observation of the TPP law component, one professor stated that the law portion appears to be a program which, despite its positive characteristics, does not give students the self-confidence that is enjoyed by those in the health sciences portion. By their own account, the law students feel stigmatized and are instructed by individuals who are not a part of the permanent faculty of the law school, thus eliminating the opportunity to form lasting relationships with professional school faculty members (TPP Advisory Committee, 1993).

In offering suggestions for recruiting and retaining students and providing advice for entry and persistence through graduation, the completers and non-completers emphasized preparedness as essential. Completers suggested that setting goals, remaining focused, and making sacrifices are tools of persistence to graduation. Non-completers suggested that money should not be a motivator. Many students enter the program thinking that the stipend will pay for child care and other personal concerns. They remembered that stipends help with school costs but are not solutions to any other financial problems.

The completers and non-completers agreed on changes needed to make TPP a success. They recommended that the recruiting should begin early in the educational process at the middle school and elementary school if possible. They suggested that, if

academically talented students are recruited into the programs, there would be fewer chances of failure and non-completion. The law component and health component should be given equal importance. The presence of the TPP central office's location at The University of Tennessee Health Science Center gives the impression that TPP is a medical program. This also is reflected in the recruitment material. The last suggestion for change came from one non-completer, who recommended that students be informed of the financial opportunities provided by the program. Financial counseling also would help students manage money. Potential participants should be informed that TPP monies are not a solution to dire financial problems. Completers did not mention money for themselves but recommended adding funding to create environments that provide more positive results in the program. One response to the question, "Why did you not mention money for yourself?" was:

I grew up poor. When I was in professional school, I was poor. Now that I am practicing in the field, I am still poor. This is not about money. It's about setting and achieving goals. It's about representing your family's dreams and the hope and progress of your community. It's about using the talents that God has given you and helping those who are less fortunate to grow and develop. More intervention should be given to the students who are at risk of non-completion. The number of black faculty and counselors at the professional schools should also be increased. The presence of black role models and mentors can be examples to students in professional education. We are willing to work and wait for the rewards.

The respondents' assessment of the effectiveness of TPP in increasing the number of black Tennessee residents enrolled in and graduating from the state's professional schools of law and medicine was both positive and negative in nature. The respondents acknowledged that the program had helped many attain their

professional goal and is helping many more. They also acknowledged that they perceived the program as having problems because of the enormous number of non-completers. The completers, looking at the program from a professional perspective, said completing professional school was a major accomplishment. However, they pointed out that there has been no follow-up from TPP's central office. The participants felt that it was important for the administrators of the program to address follow-up as part of the program design. The completers stated that they were willing to share their experiences in the pre-professional program and professional schools. They were willing to give back to the program and their communities and other communities, to provide mentoring, tutoring, and recruiting assistance. Since there has been no contact from TPP, they felt neglected and unappreciated. However, they still praise the program for its usefulness. They stated that, in theory, it is a great program with a lofty goal, but in practice, TPP needs to be overhauled to produce more lawyers and doctors. They stated that the non-completer rate was unbelievably high.

Unsolicited Data

The following unsolicited data were utilized in this study because of their relevance to the research. In the 1993 advisory committee's study of the Assessment of Prior Effect of TPP, Deans of each state professional school were asked to assess TPP participants' preparation for professional school. The Memphis State University Law school Dean stated that the academic performance of TPP students has been very poor. As of 1992, of the 23 students admitted and enrolled in the law school through TPP

program, only 2 had successfully graduated. In 1992, two were currently enrolled and 2 voluntarily withdrew because of poor grades. The remaining 17 students were academically excluded. Of the 19 students who either graduated or who were excluded, the average law school GPA was 1.39 with a range of .85 to 2.37. Of the 17 students excluded, the average law school GPA was 1.28 with a range of .85 to 1.93. Figures in Table 13 show that TPP students have not been successful in graduation when compared to all students and regularly admitted African-American students.

The Dean of East Tennessee State University medical school suggested that TPP participants appeared to make a smooth transition into the medical program. While it is difficult to make global statements about the level of preparation of program participants, participation in the TPP program provides the professional school with additional information to counsel students regarding scheduling and class load, as well as early identification of any areas that require academic support for students. Documentation revealed that with the addition of TPP-Level I health component, the medical school has the ability to identify qualified African American students with interests in health careers. Information revealed that the medical school supports the initiatives to increase its minority student enrollment. East Tennessee State University medical school officials confirmed that they have invested resources in facilitating the graduation of its minority students.

Table 13

Ranking of all TPP Enrolled Students (Law - 1992)

GPA	RANK	STATUS
.85	150/150	Excluded
.95	148/150	Excluded
1.02	163/163	Excluded
1.03	162/163	Excluded
1.04	146/150	Excluded
1.07	145/150	Excluded
1.11	145/150	Excluded
1.11	134/135	Excluded
1.20	125/125	Excluded
1.21	140/150	Excluded
1.27	160/163	Excluded
1.42	140/150	Excluded
1.52	186/197	Excluded
1.63	178/197	Excluded
1.70	133/150	Excluded
1.77	124/126	Excluded
1.93	119/120	Excluded
2.16	107/128	Current
2.33	96/111	Graduated
2.36	112/163	Current
2.37	95/111	Graduated

Source: (1993). Tennessee Pre-Professional Program Advisory Committee. TPP Central Office. Memphis: University of Tennessee Health Science Center.

The University of Tennessee Memphis College of Medicine Dean felt that, if a student performs at the C or better level in TPP, then the student was generally able to perform at a satisfactory level in the medical curriculum. As an added benefit, the pre-matriculation portion of Level II provided students with a preview of medical school expectation. He conjectured that enrollment of African-American students in the College of Medicine at UT Memphis has been increased because of TPP.

The Dean of the College of Pharmacy at The University of Tennessee Health Science Center, Memphis noted that TPP was very significant and important for black students who wish to enroll in the college of pharmacy at The University of Tennessee Health Science Center, Memphis. Since the inception of TPP, minority enrollment has increased from 2% to greater than 10%. TPP is one of the major factors involved in allowing The University of Tennessee Health Science Center, Memphis to increase black enrollment, especially with marginal and otherwise uncompetitive students.

TPP has had minimal impact on the College of Veterinary Medicine at The University of Tennessee, Knoxville, according to its Dean. Only one African-American student who enrolled in the CVM also participated in TPP.

The Dean at the College of Dentistry at The University of Tennessee Health Science Center, Memphis reported that the preparation of students for professional school has been markedly improved through the TPP. The actual numbers of TPP participants for Dentistry has been minimal. However, the preparation and value of our enrolled TPP participants has been extremely good.

Summary

The purpose of this evaluative research project was to determine the effectiveness of TPP in meeting its goal: to enroll and graduate the state's black residents from the state professional school of law and health sciences. The assessment was conducted by utilizing an evaluative model that gathered information and analyzed data by the application of selected criteria and indicators. Findings and analyses of the data generated from the two data sources produce evidence by which an assessment of TPP was made to determine its effectiveness. Evaluation of TPP was based on the following indicators:

1. **Indicator: the extent to which the program followed its plans for implementation.**
 - The goal of TPP was defined in the Stipulation of Settlement Provision II.N. of *Geier v. McWhorter*, the state's desegregation case.
 - TPP was designed to meet its singular goal: to increase the number of Tennessee black residents who enroll in and graduate from the state's professional schools.
 - The goal of TPP was stated in terms of enrolling and graduating Tennessee's black residents from state-assisted professional schools. There was no evidence found that the goal included students practicing their profession.
 - The distinction between graduating from a professional school and practicing in a profession was not clearly defined.

- There were no stated objectives to support the program goal.
 - Because the goal was narrowly stated, students who were interested in professional programs in the medical area other than medicine, dentistry, veterinary medicine, and pharmacy were excluded from participation in TPP.
 - TPP increased the number of Tennessee black residents in the professions of law and medicine.
 - The establishment of summer institutes provided mechanisms for undergraduate students to progress from the undergraduate level through professional schools.
 - TPP was closely monitored and modified to increase the number of students who enroll in and graduate from the state's professional schools of law and medicine.
 - The management of the program was not stable because of the turnover of TPP directors. Five different directors were employed for the first seven years of the program.
2. **Indicator: the numbers of students recruited compared to the program's recruitment goals.**
- One hundred fifty participants per year was the recruitment goal of the TPP program. The recruitment goal was mandated by the Stipulation of Settlement Provision II.N. of *Geier v. McWherter*.

- The enrollment goal of 150 participants per year has not been realized for any of the years from 1984 through 1994.
- Petitions to the court to change to recruitment goal were denied.
- The program was modified to included Tennessee black residents who were enrolled in private higher education institutions within the state and those enrolled in private and public higher education institutions in other states to reach the recruitment goal.
- The recruitment of these students did not significantly impact the enrollment of the TPP program.
- Recruitment information appeared to be geared toward medical students.
- Location of the central office made it appear that TPP was a medical program.
- Recruitment for the law program seemed to be overshadowed by recruitment for the medical school.
- Assessing the results of the recruitment was problematic because of inconsistent, missing, and insufficient data.

3. Indicators: documentation of evidence utilized to report program results and progress.

- TPP Advisory Council 1994 Summary Report from 1984 through 1990 provided data on program accountability.

- TPP Central Office Tennessee Pre-Professional Program Annual Report from 1991 through 1994 provided data on program accountability.
 - Missing, insufficient, and unavailable data generated questions on the validity and reliability.
4. **Indicator: the amount of dollars appropriated for program resources and services as compared to the amount of dollars promised for resources and services.**
- The TPP program was funded with state desegregation funds.
 - In 1987, \$7,300 was provided for the first year of operation. The program enrolled 23 students. In 1994, the funding had increased to \$800,000 for operational costs, and 108 students were enrolled.
 - There is no evidence that the TPP program received inadequate funding.
5. **Indicator: the overall cost of the program compared to the total number of participants enrolled, total number of program graduates, and total number of graduates who acquired licensure in law and health sciences.**
- The overall cost of TPP from 1984 through 1994 was approximately \$4,787,300.
 - The total number of Tennessee black residents who participated in the program from 1984 through 1994 was 750.
 - The total number of graduates for the same period was recorded at 31.
The cost per graduate was \$51,000.
 - The cost per participant for the 10-year period was \$6,400.

- The total number of graduates who acquired licensure to practice in their professions cannot be determined because of insufficient data and the absence of follow-up data.
- TPP appears to be costly considering the goal of increasing the number of Tennessee black residents who enroll in and graduate from the state professional schools of law and health sciences. Based on the total number of graduates (31) from an enrollment of 750, the total cost was calculated as \$4,787,300. This calculation showed that the total amount of dollars spent increased the law and health sciences professionals jointly by 4.1%

6. Indicator: students' responses to interview questions.

- Responses were both positive and negative.
- TPP was found to be necessary and beneficial for assisting black students for enrolling and graduating from the state professional schools of law and health sciences.
- The program provided an opportunity for forming partnerships and networking with other participants while enrolled in the program and after graduation. Interaction with minority faculty and staff was limited because of the small number employed at the state professional schools.
- The program provided financial assistance to the participants.

- TPP's success was defined in terms of those who completed the program. The benefits provided for the non-completers were not considered measures of success.
- The program limited its scope in health sciences to medicine, dentistry, pharmacy, and veterinary medicine.
- TPP training program eliminated students who were interested in the medical areas of physical therapy, occupational medical technology, and other medical fields.
- Completers are underutilized resources. There has been no follow-up to request participation with ongoing TPP efforts such as recruitment, workshop presentations, and speaking engagements.
- Non-completers seem to have been forgotten entities.
- Follow-up data on participants were limited and provided little information on presentation locations and professional practices.
- TPP appeared to favor the participants who had selected the medical areas. The location of its central office at The University of Tennessee Health Science Center, the promotional material, and the support services were more geared toward the medical students. The law students felt isolated and undervalued.

Unsolicited data that were generated from the Deans of the Health Sciences programs confirmed that TPP was a vital program in enrolling and graduating the state's black residents from the state-assisted professional schools of medicine. The

Deans of the law schools did not feel confident that TPP was particularly effective in addressing the same issues in the area of law.

The evaluative information produced from this finding and analyses were used to develop chapter 5, which consists of conclusions of the study and recommendations based on the conclusions.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The case of *Sauders v. Ellington* (1964) was a civil suit brought against the State of Tennessee to challenge its desegregation policies and practices within the state's higher education system. The 1984 agreement reached in the resolution of the case called the Stipulating Settlement was filed under *Geier v. McWherter*. Cooperative planning and program development among the higher education agencies of the state to provide equal access to educational opportunities for its black residents were the impetus that would drive the tax supported desegregation initiatives. The Tennessee Pre-Professional Program (TPP), an outgrowth of the Stipulation of Settlement *Geier v. McWherter*, began development in 1984 and was implemented in 1987.

TPP was designed to increase the representation of Tennessee black residents in the state professional schools of law and health sciences. More specifically, the goal of TPP was to increase the number of black Tennessee residents enrolled in and graduated from the state professional schools of medicine, veterinary medicine, pharmacy, dentistry, and law. The stated purpose of this evaluative study was to determine if TPP had been effective from 1984 through 1994 in meeting its goals. An evaluative model composed of selected criteria and indicators and an interview guide used to solicit responses from TPP participants provided data to support these conclusions.

Data collected from responses to a set of interview questions presented evidence from participants' perspectives of the effectiveness of TPP based on their personal perceptions, experiences, and satisfactions. TPP was beneficial in providing access to

the state professional schools of law and health science. To support this conclusion, the program data verified that a prerequisite to program implementation that produced enrollment and graduation was program establishment. At one time, Tennessee, like many southern and border states, provided higher education in a system that was separate, unequal, and protected by the law. Analyses and interpretation of findings suggest that participants appeared to regard establishment of TPP as significant as an effective measure in overcoming the vestiges of past and present practices of segregation and discrimination.

Evidence suggested that most participants appeared to view the establishment of TPP as an effective program to address the barriers that prevent the black residents of Tennessee from becoming full partners in the state's present system of higher education.

Analysis and interpretation of the findings indicated that participants perceive TPP's prematriculation activities as effective in providing access to the state professional schools of law and health sciences. Evidence also suggested that TPP participants appeared to view the program as equally effective in providing opportunities for assistance in gaining admittance to a professional school, progression through graduation, and acquisition of professional licensure. Prematriculation activities have provided opportunities for life long, nurturing relationships. These relationships appeared to be perceived by participants as effective in forming survival teams that are essential to professional school persistence. These relationships also

appear to be important to participants because the participants share similar backgrounds and similar goals.

Participant responses suggested that TPP was effective in providing financial assistance required to cover the costs of the professional schools of law and health sciences from prematriculation activities through graduation. Analyses and interpretation of the responses further suggest that financial assistance for participants was not a major concern. Indicators suggested that the cost of tuition, room and board, and other directly related fees for the professionals of medicine, veterinary medicine, pharmacy, dentistry, and law were provided through desegregation funds earmarked for stipends and scholarships.

Participant responses provided evidence that TPP did not provide adequate support and intervention for those who did not complete the program and that TPP did not provide a follow-up program. These omissions left the participants feeling isolated and unappreciated. However, it should be noted that, in spite of these drawbacks, participant responses indicated that TPP was perceived to be effective in enrolling and graduating Tennessee black residents from the state professional schools of law and health sciences.

In direct contrast to the participants' perception of the effectiveness of TPP, analysis and interpretation of findings suggest that TPP was ineffective in enrolling and graduating Tennessee black residents from the state professional schools of law and health sciences. The criteria used in the evaluation model to assess the effectiveness of

the programs revealed major indicators suggesting that TPP was ineffective in meeting its goal.

Evaluative indicators suggested that the program was ineffective in causing any significant changes in the percentage of students who enrolled and graduated from the state professional schools of medicine, veterinary medicine, pharmacy, dentistry, and law. Evidence indicated that students were more likely to graduate from these professional programs if they were not participants in TPP. For the first five years of the implementation of TPP, findings reveal that non-TPP black students enrolled in and graduated from the state professional schools of law and health sciences at a rate that was consistently higher than TPP enrollment and graduation rates for the same period.

Indicators reveal that TPP was ineffective in retaining students in the program, thus producing low graduation rates. TPP retention rates were excessively low: of the students enrolled in TPP, 95.9% failed to graduate. This indicator suggests that intervention strategies proposed by the program designers were ineffective in providing the necessary measures needed for a large majority of TPP participants to persist to graduation. Evidence suggested that because of TPP's ineffectiveness in participant retention, the program could be perceived as an actual detriment to the students who failed to complete the program. According to the program's definition, these students are classified as unsuccessful and labeled as non-completers and dropouts. Analysis of the data confirms that low retention rates produced low graduation rates for the 10-year period of study. Graduation rates totaled less than 5%.

Program data verified that TPP was ineffective in developing and implementing a recruitment plan. Evidence revealed that, for the 10-year period of study, TPP did not meet the recruitment goal that was mandated by the Stipulation of Settlement for any one year of the program's operation. Further analysis of the recruitment plan revealed what appears to have been recruitment biases, which may have been a factor in the plan's ineffectiveness.

Indicators suggested that the recruitment material designed to generate interest in TPP directed its attention, energy, and findings toward the medical program, paying little attention to the recruitment needs of the law program. The location of the TPP's central office operations at The University of Tennessee Health Science Center, Memphis appeared to contribute to the perception that TPP was a medical program. A large number of program participants enrolled in TPP resided in the western part of the state, the same geographical area as the Medical Sciences Center. The eastern and middle part of the state produced few TPP participants. The results of these recruitment biases appeared to be reflected in professional graduation rates. For the 10- year period of study, a combined graduation rate of three was produced by the professional schools of law at The University of Tennessee, Knoxville and at Memphis State University. The graduation rate for The University of Tennessee, Knoxville, Professional School of Veterinary Medicine for the same period was one. The recruitment plan for TPP appeared to be ineffective in meeting the court's mandated recruitment goal.

The findings confirm that the development and implementation of TPP was mandated by the courts to be a cooperative effort of the higher education entities within the state. Evidence suggested that compiling, maintaining, and publishing of data generated from these entities appeared to be ineffective. TPP record keeping and reporting information appeared to reflect a system that is seriously problematic. Data to support enrollment in prematriculation program and admission to professional schools appear to be insufficient. Progression data from one TPP level to another often did not reflect data related to admission to professional schools. Several tables reflected missing and inaccurate data. Participant data needed to accurately determine the number of graduates from TPP for the 10-year period to study were outdated and incomplete. A program that was designed to increase the number of black residents who as a result of this program became lawyers and doctors appears not to be able to provide the information to make that determination. A follow-up program necessary to provide this information was not a part of the original design. Evidence suggested that the ineffective record keeping has produced problems in the program accountability that challenged validity and reliability. The results of all the efforts of TPP's progress have not been accurately presented, making the data reported in study questionable and subject to varying interpretations.

Evidence suggested that TPP was a desegregation program that was not plagued by the lack of funding. Funding of the program for the 10-year period of study was over \$4 million. It appears also that the utilization of this fund may be interpreted as ineffective because of the high cost of the program and low productivity. The amount

of taxpayer dollars spent to educate black residents who became lawyers and doctors was excessive, producing a graduation rate of only 4.1% of those who enrolled in TPP for the 10-year period of study. And there are no follow-up data to determine which of those are licensed to practice their profession.

The 1984 Stipulation of Settlement of *Geier v McWherter*, the State of Tennessee's desegregation case, mandated the development of a series of programs that would provide access to all public higher education institutions for all of its residents. The Tennessee Pre-Professional Program was one of the mandated desegregation programs stipulated in Provision II.N. of the settlement. It was designed to increase the representation of Tennessee black residents in the state professional schools of law and health sciences. Because of past laws, customs, and beliefs, educational opportunities for blacks in these public institutions were extremely limited.

In summary, the singular goal of TPP chronicled throughout TPP records stated that it was to increase the number of the state's black residents who enrolled in and graduated from the state professional schools of law and health sciences. Health sciences disciplines include dentistry, veterinary medicine, medicine, and pharmacy. This research project, designed to evaluate TPP to determine its effectiveness in meeting its goal for the 10-year period 1984 through 1994, found that the program had positive effects on its successful participants. However, this research project found also the program to be basically ineffective in meeting its goal and not a good use of the tax dollars that support all of the desegregation programs in the state public higher education system, based on the following indicators: (a) No significant changes in

percentage of enrollment and graduation of black students can be attributed to TPP; (b) the recruitment goal of the program had not been met for any one year of the study and the plan was compounded by recruitment biases; (c) the graduation rates were extremely low and attrition rates were excessively high; (d) insufficient, unavailable, and missing data raise unanswerable questions about the program's ability to provide accurate (i.e. valid and reliable) information of participants and graduates; (e) follow-up and tracking initiatives were not utilized to garner responses from program completers and non-completers; and (f) TPP had excessive expenditures for results achieved.

Because of such ineffectiveness, it is important to make recommendations for practice and future research which are submitted in the following section.

Recommendations for Practice

1. The Tennessee Pre-Professional Program as it stands today should be terminated, based on the information on the program's operation from 1984 through 1994.
2. TPP should be reorganized, redirected, and reestablished under the guidance and at the location of Tennessee's professional schools of medicine, veterinary medicine, dentistry, pharmacy, and law. The professional schools of the state of Tennessee are well established in academics and student support and can give the emphasis needed to enhance the success of the state's black residents in the areas of law and health sciences.
3. Given the track record of TPP, an ongoing external evaluation system should be intergrated into the program to document status and progress.

4. TPP as originally designed is limited to the professional areas of law, medicine, veterinary medicine, dentistry and pharmacy. TPP should be expanded to include other professional areas such as physical therapy, occupational medical technologies and teaching.

Recommendation for Future Research

1. The curriculum, which appeared to be an important part of TPP, was not evaluated in this study. An evaluation of the curriculum, those who deliver instruction, and the student outcomes would provide useful information in planning and developing appropriate measures of participation and success.
2. Because the TPP records document an excessively high rate of attrition for the 10-year period of study, research on program non-completers may provide data on academic performance, opinions, behaviors, and attitudes that impact student success.

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APPENDICES

APPENDIX A
APPROVAL LETTER



November 8, 1996

Office of the Senior Vice President
810 Andy Holt Tower
Knoxville, TN 37996-0182
Telephone (615) 974-3211
Fax Number (615) 974-3211

Ms. Brenda Lawson
Office of Research Administration
404 Andy Holt Tower
University of Tennessee, Knoxville
Knoxville, TN 37996

Re: Survey of Tennessee Pre-Professional Program Participants and
Graduates

To the UTK Committee on Research Participation:

The Office of the Senior Vice President hereby grants permission for Ercille Williams, UTK Doctoral Candidate, to conduct a telephone survey of the Tennessee Pre-Professional Program (TPP) participants and graduates who participated in the program through 1995. The TPP Program is a state-wide effort funded under the Geier v. Sundquist Desegregation Stipulation of Settlement and administered jointly by the Tennessee Higher Education Commission, The Tennessee Board of Regents and The University of Tennessee. Day-to-day operations of the TPP program are conducted by UT Memphis under the supervision of the Office of the Senior Vice President. The TPP participants will be surveyed to determine their perception of the effectiveness of the Tennessee Pre-Professional Program.

The Office of the Senior Vice President agrees that any data collected in the performance of this survey promised to the TPP participants to be confidential will be held in such confidence by Ms. Williams. The data will be utilized by Ms. Williams in her dissertation, but it will not be released in any individually identifiable form to the Senior Vice President's Office, University of Tennessee, any other agency, or the general public, unless required by law. Data collected for these purposes may not be used for any other purposes unless the TPP participants are informed in detail of such purposes and consent is obtained from each individual. Individual responses will only be analyzed and reported in combination with the responses of others.

A handwritten signature in black ink, appearing to read 'Katherine N. High'.

Katherine N. High, Ed.D.
Associate Senior Vice President

APPENDIX B
INTERVIEW GUIDE
TENNESSEE PRE-PROFESSIONAL PROGRAM
PART I
DEMOGRAPHIC DATA

Undergraduate Information

Institution _____

Location _____

TPP Matriculation Year _____

Graduation Year _____

Professional School Information

Professional School _____

Location _____

Matriculation Year _____

Graduation Year _____

INTERVIEW GUIDE FOR TENNESSEE PRE-PROFESSIONAL

PROGRAM PARTICIPANTS

PART II

1. How did you come to be involved with the TPP?
2. What has been your experience with the TPP: in college, in your profession and in the training program?
3. Did you graduate from one of the state's professional schools?
4. Have you passed the State Boards for your profession? If not do you anticipate sitting for them in the future?
5. What suggestions would you offer for recruiting and retaining students in the TPP through graduation from professional schools?
6. What advice would you offer a student who is anticipating enrolling in the TPP?
7. What changes would you recommend to improve the effectiveness of TPP?
8. What is your overall assessment of the effectiveness of the TPP in increasing the number of black Tennessee residents enrolled in and graduating from the State's professional schools of law and health sciences?
9. In one word or phrase, how would you describe your experience with TPP.

APPENDIX C

LETTER TO TPP PARTICIPANTS

Dear TPP Participant:

I am conducting a study of the effectiveness of Tennessee Pre-Professional Program (TPP) as part of the requirements for a Doctorate of Education degree. I am requesting your participation in an interview because you have been a TPP participant. Attached is a list of questions that will be used in conjunction with other data sources to determine from a participant perspective, the effectiveness of TPP in increasing the graduation rate of black students from the state's professional schools of health, sciences and law.

I will contact you by telephone to get your consent to participate and response to the questions. If you are interested in participating in this research, please review the questions and expect my call in the very near future. Your responses will be recorded and transcribed verbatim. Your individual responses will be held in the strictest confidence. This information will not be released in any individually identifiable form. Your responses will be analyzed and reported in combination with other responses. The data will be utilized only for this study unless you are informed in detail and your consent is obtained. Your refusal to participate will involve no penalty or loss of benefits. The data will be stored in a vault in the Office of the Senior Vice President, at the University of Tennessee, then disposed of as required by the university.

I will greatly appreciate your cooperation and will provide you with a summary of findings of this study if you desire. I sincerely believe that this study will help increase the graduate rates of black students from Tennessee professional schools.

Sincerely,

Ercille H. Williams
Doctorate Candidate
The University of Tennessee, Knoxville

APPENDIX D

LETTER TO PANEL OF EXPERTS

Dear

As part of my research project for the Doctor of Education degree in Leadership Studies in Education from the College of Education at The University of Tennessee, Knoxville, I am preparing to conduct a study of the Tennessee Pre-professional Program (TPP) to determine its effectiveness in enrolling and graduating the state's black citizens from its professional schools of law and health services. I am requesting that you serve on this panel based on your expertise and experience with TPP.

Enclosed is a copy of the criteria that will be used to assess the effectiveness of TPP. The criteria for evaluation is based on a combination of evaluation models and theories. Also, included is a copy of the telephone interview guide for TPP participants. I plan to collect data from the students who participated in TPP and have gone on to graduate from the State's professional schools. Non-completers of the program will also be asked to respond to interview questions.

On the documents themselves or on a separate sheet of paper, please indicate whether evaluation criteria are appropriate measures of the TPP's effectiveness and also indicate whether items on the interview guide need to be restated, deleted, or added. Your comments on the evaluation criteria and interview guide will be very much appreciated.

Thank you for your assistance in this study. Please return your responses to me at the enclosed address. You can also call me for further clarification at (423) 539-7207.

Sincerely,

Ercille H. Williams

Attachment

APPENDIX E

GEIER VS. MCWHERTER

STIPULATION OF SETTLEMENT

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION

SEP 25 1984

BY

CLERK

DEPUTY CLERK

FILED

AUG 31 1984

BY

DEPUTY CLERK

RITA SANDERS GEIER, et al.,)

Plaintiffs,)

UNITED STATES OF AMERICA,)

Plaintiff-Intervenor,)

RAYMOND RICHARDSON, JR.,)
et al.,)

Plaintiff-Intervenors,)

E. COLEMAN MCGINNIS, et al.,)

Plaintiff-Intervenors,)

vs.)

LAMAR ALEXANDER, et al.,)

Defendants.)

No. 5077

Judge Thomas A. Wiseman, Jr.

STIPULATION OF SETTLEMENT

Plaintiffs RITA SANDERS GEIER, et al., and
Plaintiffs-Intervenors RAYMOND RICHARDSON, JR., et al., and
Plaintiff-Intervenors E. COLEMAN MCGINNIS, et al., having
sought further injunctive relief to effectuate statewide
desegregation of all Tennessee institutions of public higher
education, and having conducted extensive negotiations with
all parties to this lawsuit in an effort to bring about a
just resolution of the issues, without further litigation,
that will achieve a unitary¹, desegregated system of public
higher education in the State of Tennessee,

¹It is the purpose of this order to achieve a unitary
desegregated system and not to achieve a merger of the

IT IS HEREBY STIPULATED by and between the undersigned, and subject to this Court's approval, as follows:

I. INTRODUCTION

A. The primary purpose of this Stipulation of Settlement is the elimination of Tennessee's dual system of higher education. This purpose includes the maximization of educational opportunities for black citizens of the State of Tennessee and the improvement of educational opportunities for black citizens of the State of Tennessee. The parties agree that statewide access to public higher education in the State of Tennessee by black students and the degree of black presence in faculty and administrative positions statewide will not be decreased as a result of the implementation of the provisions of this Stipulation. It is the intention of the parties that the dismantling of the dual system shall be accomplished in such a way as to increase access for black students and increase the presence of black faculty and administrators statewide and at the historically white institutions.

3. Defendants commit to continue efforts to achieve their current desegregation objectives and to revision of those objectives as necessary after the pertinent studies

existing systems of higher education in Tennessee.

referenced herein are completed. It is the intention of defendants through implementation of this plan to achieve desegregation of all institutions of higher education in the state.

C. Each defendant agrees to include a proposed budget for their part of any plan or program developed hereunder and to request adequate funding for each plan or program at their respective stages of the normal budgetary process and the Governor will make every effort within the budgetary process to secure adequate funding from the General Assembly. Prior to finalization of this stipulation of settlement, and no later than October 1, 1984, defendants University of Tennessee (UT) and the State Board of Regents (SBR) shall submit to all parties an estimated total amount necessary to implement the plans and programs to be developed hereunder.

D. Defendants agree to begin collecting selected data in accordance with the reporting forms of the Office of Civil Rights (OCR) of the United States Department of Education, but will continue to monitor progress by means of established reporting methods in order to preserve historical comparisons. The data to be utilized will be selected by mutual agreement of all parties prior to finalization of this Stipulation of Settlement, and no later than October 1, 1984.

3. The Desegregation Monitoring Committee will establish a procedure for monitoring and reporting progress to the Court on the desegregation of all institutions. The Committee will identify problem areas and make recommendations to the defendants concerning research and actions that should be undertaken and new programs that should be developed to address problem areas.

F. Progress toward desegregation at Tennessee State University (TSU) shall be placed under the Desegregation Monitoring Committee and shall be monitored in the same manner as is progress in desegregation at the other institutions.

G. Each Monitoring Committee report shall include a description of specific steps taken to implement each provision in this settlement agreement. In areas where sufficient progress has not been made, the Desegregation Monitoring Committee shall include in the monitoring committee report further steps to be taken by the boards to assure progress in this area.

H. Each Desegregation Monitoring Committee report shall include a listing of each presidential/chancellor, vice presidential/vice chancellor and dean position filled during the reporting period at each university, with the number and race of applicants for each position and the race of the person selected.

I. All plans to be developed pursuant to this Stipulation of Settlement shall run for a period of five years and shall contain benchmark objectives to be achieved by the end of each year.

II. STUDENT DESEGREGATION

A. Interim objectives and methodologies for setting long range objectives shall insure the achievement of non-racially identifiable institutions of higher education in Tennessee.

B. Defendants agree that as soon as necessary data are available, and no later than one (1) year from the date of this Stipulation of Settlement, a study will be conducted to ascertain whether there is a statewide disparity in college-going rates among black and white high school graduates in Tennessee, and long-range and interim desegregation objectives will be modified if necessary in an effort to eliminate any statewide disparity. Said study shall be completed no more than 180 days from the date the necessary data are available.

C. Defendants will conduct a study within 180 days to ascertain whether there is a statewide disparity by race in the ratio of graduates of public institutions in Tennessee who enter graduate or professional programs in public insti-

tutions in Tennessee, and long-range and interim desegregation objectives will be modified if necessary in an effort to eliminate any statewide disparity.

D. SBR shall immediately establish a 1993 interim objective for Tennessee State University (TSU) of 50% white undergraduate full-time equivalent enrollment. The parties agree that the ultimate long range objectives for the racial composition of the students at TSU will be set on the same basis as the objectives are set at all other institutions in the State.

E. SBR commits to retain such admission policies at its 2-year institutions for the foreseeable future and for at least five years as will insure educational access to any high school graduate.

F. Defendants will provide within 90 days a statewide survey of admissions and retention requirements for 4-year public institutions. If either governing board should take any steps in the next five years to increase admissions and/or retention requirements and to establish minimum requirements statewide, the Board will:

1. Conduct a desegregation impact analysis prior to the implementation of the new requirements, to ascertain whether these new requirements will have an adverse impact on black students;
2. Authorize institutions to enroll a percentage of new entering classes under alternative

admissions standards, said percentage to be determined periodically by the appropriate governing board and to be consistent with the objectives of this Stipulation of Settlement. The rate of alternative admissions at TSU shall in no event be increased beyond the rate for the 1984-85 academic year;

3. Provide for the phasing in of these new requirements;
4. Provide developmental education programs consistent with any master plan as provided in T.C.A. §49-7-202(c)(1) as approved by the governing board(s) available to students throughout the state to promote retention of those students entering under alternative admissions standards. The funding and standards for these programs will be developed as needed, in accordance with the implementation of parts 1 through 3 of this paragraph II (F); and
5. Each institution, through its respective governing board, will advise the Desegregation Monitoring Committee of the expected impact of increased admission and/or retention standards and will report on its desegregation objectives in light of the new standards, and also will report on alternative means of achieving its desegregation objectives.
6. SBR agrees that the admission standards at TSU will be raised over a period of 5 years. The admission standards shall include a minimum GPA and minimum ACT neither of which shall be lower than those established for MTSU. TSU minimum GPA shall increase to no less than a 2.25 over the next five years.

G. The defendants shall conduct a study within 120 days to determine the feasibility of a plan whereby other-race² students shall be accorded tuition discounts, loans, scholarships and/or other incentives for purposes of

²"Other-race or minority students" and "other-race or minority faculty" refer to white persons with respect to predominantly black institutions and black persons with respect to predominantly white institutions.

desegregation. These incentives will also be studied for the purpose of encouraging the retention of other-race students. The plan shall be implemented by the fall semester of 1985 if and to the extent feasible.

H. Within 180 days defendants will identify graduate programs where blacks are underrepresented; defendants will develop a scholarship program for Tennessee residents to achieve graduate desegregation objectives and defendants will request adequate funding for this program pursuant to paragraph I (C) hereinabove; and universities will submit projections for increasing the number of blacks appointed as teaching and research assistants.

I. No public institution of higher education in Tennessee shall actively engage in racial discrimination or practices which discourage enrollment or involvement of other-race persons.

J. UT and SBR shall conduct a study of each of their respective institutions to determine whether any public institution of higher education in Tennessee projects an image as being racially identifiable. UT and SBR each shall appoint members of a bi-racial committee to conduct this study. Each committee shall consult with a broad spectrum of residents in the service area, as well as the faculty, students and administration of each institution and shall

report its findings and recommendations to the appropriate governing board within 120 days. SBR and UT Boards shall implement changes necessary to create in each institution the image of an institution that serves the citizens of Tennessee on a non-racial basis.

K. Defendants will review various postsecondary developmental education programs and develop within one year a plan designed to address the retention, performance and progression of students at all public institutions.

L. SBR and UT will within 180 days review their financial aid programs to identify any inequities in the awarding of public or private financial aid and, if inequities are identified, implement appropriate measures to eliminate such disparities. The award of merit scholarships shall be reviewed to determine if they are made on any basis other than merit.

M. SBR and UT will monitor, develop and/or coordinate a statewide other-race recruiting program, utilizing bi-racial recruiting teams, for the institutions within the respective systems. This program shall be fully operational within 180 days from the date of this Stipulation of Settlement, and shall contain the following elements:

1. Each predominantly white institution shall utilize a black and each predominantly black institution shall utilize a white for recruiting other-race students. By fall semester, 1985, 50% as an objective of the recruiters used by TSU shall be white.

2. To assist the institutions in identifying prospective other-race students, defendants shall obtain from the Educational Testing Service and the American College Testing Program, and provide to each institution each fall, a list of all Tennessee students (by race) still enrolled in high school who took the SAT or ACT and agreed to have their names released.
3. Each institution shall send recruitment literature to each high school in its service area and encourage the high school to disseminate the same to all students, with particular emphasis given to reaching other-race students.
4. Defendants shall develop and provide to the predominantly white institutions which have graduate and professional programs a list of all black students expected to graduate during that school year from public and private undergraduate institutions in Tennessee, and who agree to have their names and their educational records released. The list shall provide the following information: name of each student, the student's major field, grade point average, and other relevant information. Each predominantly white institution shall actively seek applications from qualified students whose names appear on the list.
5. Defendants shall obtain and provide to all predominantly white institutions a list of all black students enrolled in Tennessee institutions of public higher education who take the Graduate Record Examination (GRE) and who agree to have their names released. Each predominantly white institution shall solicit applications from among all qualified students whose names appear on the list.
6. Tennessee's state-supported law schools shall obtain through the SBR and UT Governing Boards a list of black students enrolled in Tennessee's public and private four-year institutions who have taken the Law School Admission Test (LSAT) and agree to have their names released. A comparable list of black students who have taken the Medical College Admission Test (MCAT) and the Dental Admission Test (DAT) shall be supplied to Tennessee's

state-supported medical and dental schools. The professional schools shall actively seek applications from among qualified black students who take the above-named examinations and whose names appear on the appropriate list.

N. Defendants will coordinate the development of a cooperative program to increase the number of black students who enroll in and graduate from professional programs. Every spring beginning in 1985 and for five years, 75 black sophomore students who are Tennessee residents enrolled in Tennessee public institutions will be selected by committees representing the faculties of all state-supported professional schools and all other public universities in the state for pre-enrollment in the state's schools of law, veterinary medicine, dentistry, pharmacy and medicine. There shall be representation by black faculty members on these committees, to the extent available. The professional schools will counsel these students, assist in planning their pre-professional curricula, provide summer programs at the end of their junior and senior years and agree to their admission as first year professional students if they successfully complete their undergraduate work and meet minimum admissions standards. Defendants will consult with other states that have developed similar programs [e.g., Kentucky] and complete development of the program described in this paragraph II, (N), including a proposed budget and projected source of funds, within 180 days.

III. EMPLOYMENT

A. -Defendants will review various approaches, including effective programs in other states, to increase the number of qualified black applicants for employment in public institutions of higher education in Tennessee. Defendants will implement the program(s) determined to be feasible and effective to increase the number of qualified black applicants. Defendants will actively recruit in the relevant labor market to increase the black presence, especially in disciplines where blacks are underrepresented, at the predominantly white institutions.

B. Within 180 days, SBR and UT shall develop a plan, including financial and other incentives, to attract white faculty and administrators to TSU and black faculty and administrators to predominantly white institutions. The plan shall be widely publicized at all institutions. The plan shall address credit for prior service and other benefits of any person eligible for participation in the plan, including transferring faculty members to the extent allowed by law.

C. Defendants will within 120 days identify disciplines where blacks are underrepresented and where the national availability pool is small, and request adequate funding through the budgetary process pursuant to ¶I (C) above to

develop a "grow-your-own program," utilizing the public and private universities in Tennessee, to increase the pool of qualified black candidates for employment as faculty and administrators in the public universities.

D. SBR and UT will within 120 days request adequate funding through the budgetary process pursuant to §I (C) above to institute a staff development program, to enable black staff members to obtain advanced degrees and become eligible for positions of higher salary and higher rank within all institutions of higher education in the State of Tennessee.

E. Defendants will develop a plan for a Black Faculty Development Program, including a proposed budget therefor, within 120 days. The program will be designed to increase the number of black faculty with doctoral degrees at all public institutions of higher education.

F. SBR shall immediately establish as a five year interim objective for the desegregation of TSU's faculty and administration at least 50% white faculty and at least 50% white upper-level administrators (president, vice-presidents, deans, department chairs). All other institutions shall increase their efforts to attract and employ other-race faculty and administrators and accomplish their objectives for other-race employment by utilizing the provi-

sions herein. After a period of five years, the defendants shall assess progress made under this plan and set further interim and/or long-range objectives for each institution as may be required to achieve a non-racially identifiable system of higher education.

G. Progress in affirmative action will be a factor in the review of department heads, deans and vice presidents/vice chancellors by institutional presidents and chancellors and in the review of presidents and chancellors by the chief executive officer of each system.

H. The SBR and UT must approve or disapprove, prior to any offer being extended, the recommended choice of the administration at each of its universities for the positions of vice president/vice chancellor, dean and department chair, beginning immediately upon execution of this agreement. This review will take into account the following factors:

1. The credentials and qualifications of the applicant.
2. Affirmative action³ responsibilities of the institution in the system of the Board, and the degree of achievement of institutional desegregation objectives.
3. The degree of commitment to affirmative action on the part of the applicant.

IV. HIGHER EDUCATION IN MIDDLE TENNESSEE

³"Affirmative action" refers to efforts to increase employment of black staff and faculty or enrollment of black

A. SBR and the Tennessee Higher Education Commission (THEC) agree to develop within 180 days a comprehensive plan for the enhancement of Tennessee State University (TSU), with the unique specialized regional and statewide missions, and to implement TSU's mission as the regional urban university for Middle Tennessee. Sufficient funding through the normal budgetary process will be projected in order to achieve success of the provisions of the plan.

B. To the extent that the increase in admission standards at TSU is expected to increase the quality of the student body but have an adverse budgetary impact as a consequence of total enrollment decline, THEC will follow its existing policy of negotiating a wider enrollment range for TSU so as to minimize this budgetary impact.

C. Within 120 days SBR will complete a physical facilities study for TSU that will include: a) a report of a comparative study between TSU and selected regional, predominantly white institutions throughout the State which are comparable, to identify deficiencies in TSU's physical plant and total campus environment; b) an assessment of the cost of bringing all TSU facilities up to standards for safety, health, environmental protection, and access to the

students at historically white institutions and enrollment of white students and employment of white staff and faculty at historically black institutions.

handicapped; c) recommendations for changes or alterations necessary to support TSU's new mission.

Within 60 days of completion of the study, SBR will complete a plan to implement necessary renovations, modifications, and new construction at TSU in accordance with the study, such implementation to be completed within five years.

D. SBR will include in the TSU physical facilities plan the total cost of implementation and the proposed source of funds (state appropriations, bond issues, federal sources, etc.). SBR commits to assuring facilities at TSU that are comparable to those at comparable predominantly white institutions and adequate for TSU's enhanced mission.

3. SBR will within 120 days convene presidents and senior academic officers at Austin Peay State University, Middle Tennessee State University and TSU to a) discuss whether program duplication, especially at the post-baccalaureate levels, is a barrier to the implementation of the state's commitment to enhance TSU and b) develop a plan for the realignment of certain specified programs in order to support TSU's enhanced mission. E.g., post-baccalaureate programs in education will be reviewed and, if necessary, realigned to create a master's degree in urban education at TSU.

F. During the next five years, the SBR will accord TSU first priority for all new graduate program proposals in the Middle Tennessee region. No doctoral programs will be proposed or approved for Middle Tennessee State University or Austin Peay State University during the five-year period. In addition, there will be no net increase of new master's level degree programs at either Middle Tennessee State University or Austin Peay State University during the five-year period.

G. SBR will develop at TSU within 120 days, with appropriate services of experts, needed and effective new programs to be offered at TSU. These proposed programs will be submitted to THEC for review and THEC approval will be obtained prior to implementation of the programs. In exercising its responsibilities of review and approval, the THEC will give special consideration to programs consistent with the aims of this plan.

H. SBR will within 180 days develop at TSU an Institute of Government, funded through the normal budgetary process, offering a degree program and courses for credit in public administration to train qualified administrators as needed for senior and middle level positions in state, county and local government and to conduct research. SBR will provide consultants to TSU to assist in the

development of this new program and to recommend how TSU's current program in public administration could be strengthened and the kinds of new programs that should be offered.

I. SBR will request adequate funding pursuant to Paragraph I (C) hereinabove to match any existing or future scholarship programs designed to increase white student enrollment at TSU with an identical scholarship program designed to increase black enrollment at Middle Tennessee State University.

J. The Board of Regents shall formulate a plan for the implementation of an educational "consortium" between MTSU and TSU which will require the institutions to establish a common university calendar, publish and disseminate a joint listing of all courses offered at each institution and design registration procedures whereby students at one institution may attend classes at the other for up to 30 hours of credit.

K. The SBR shall within 180 days initiate a study of all facets of administrative functions at all campuses of TSU. Faculty and students from both campuses of the institution will actively participate in this study. Specific recommendations for personnel and other changes necessary to improve the administrative function of all campuses of the university shall be made and implemented by the SBR.

V. Copies of all plans and proposals required to be formulated pursuant to this stipulation shall be submitted to counsel for all parties prior to implementation. Copies of all budget requests for plans or proposals developed pursuant to this Stipulation of Settlement shall be submitted to counsel for all parties to the lawsuit by the THEC upon receipt from UT and SBR.

VI. Each institution in the SBR and UT system shall annually make a substantial number of recruiting visits to other-race high schools.

VII. The governing boards or the institutions under their jurisdiction will conduct a desegregation impact analysis prior to implementing any proposals for the creation of new institutions or initiating changes in the mission of existing institutions. Defendants commit to implementing no such changes which would be inconsistent with provisions of this Stipulation of Settlement or which would adversely affect desegregation of higher education in Tennessee.

VIII. Defendants agree that no institution will be identified as a one-race institution or a predominantly one-race institution in any official university publication or in any public statement made in an official capacity by any administrator of that institution. Each institution mission statement shall refer to its mission as an institution com-

mitted to education of a non-racially identifiable student body.

IX. This Stipulation of Settlement shall not prevent any plaintiff or plaintiffs-intervenors from seeking further relief if funding requested through the normal budgetary process is not provided by the legislature to implement its provisions or is otherwise not provided.

X. If plaintiffs or any of the plaintiffs-intervenors to this lawsuit believe that any defendant or any agent or employee of a defendant is not acting in good faith to implement the provisions of this Stipulation of Settlement, their counsel shall initially bring the matter to the attention of defendants' counsel in writing, with service upon counsel for all other parties, identifying the specific act or acts alleged to be inconsistent with the objectives of this Stipulation of Settlement. The parties will make every effort to resolve such disputes informally without bringing the matter before the Court. However, if efforts at informal resolution of disputes are unsuccessful, any of the plaintiffs or plaintiffs-intervenors to this lawsuit may file a motion with the Court for further injunctive relief to enforce compliance with this Stipulation of Settlement.

Upon the filing of a motion by any party the Court shall hear arguments from counsel for all parties. The Court shall set the motion(s) for hearing within 60 days.

XI. The objectives provided for in this Decree are not to be construed as quotas.

XII. Defendants do not admit that failure to achieve any objective in itself constitutes noncompliance with this Decree.

XIII. Defendants by agreeing to this Stipulation do not admit that they are presently in violation of any constitutional or statutory provision.

Dated: Nashville, Tennessee
August 1984

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VITA

Ercille Hall Williams was born in Mason, Tennessee in 1946. She attended public schools in Fayette County. In 1964 she graduated from Fayette County Training School, a high school equivalency for the county's black students. She attended Lincoln University in Jefferson City, Missouri from 1964-1968 where she earned a Bachelor of Arts degree in Journalism. After three years of teaching at her high school alma mater, she entered the University of Tennessee where she earned a Masters of Science in Curriculum and Instruction in 1974. Afterwards she resumed her career in the field of education. She taught in the Chattanooga Public Schools System for one year. Her experiences in higher education include: Developmental Studies instructor, Roane State Community College, Harriman, Tennessee; Director of Student Teaching, Voorhees College, Denmark, South Carolina; and adjunct instructor in Education, Knoxville College, Knoxville, Tennessee. After an eight-year absence from education, she joined Mississippi State Technical Community College as Assistant Dean of the Continuing Education Division in 1989. From 1990 to 1996, she served as the administrator of the college's Division Street branch campus. Presently she is the Assistant to the President of the College for Diversity Development.